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Teachers College Studies in Education

Working to Learn

General Education through Occupational Experiences

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To Esther and Bonnie

In Acknowledgment

THE author wishes to express his appreciation to the various people who have made this volume possible and who have helped so much in its preparation. Professors Gordon N. Mackenzie, John L. Childs, and William B. Featherstone have been particularly helpful in their suggestions and criticism. The author is grateful for time they managed to scrape together in exceedingly busy days. To Professor Childs especial thanks are due for first suggesting the possibilities that lie in occupational education. To Professor Mackenzie and Professor Featherstone the author is obliged for constructive suggestions in making curricular application of the concept.

At the time of writing, the author was living and working in the Northeast and restricted his travel to the Northeastern and North Central States. For that reason the examples cited are chiefly representative of these areas. Since the time of writing the author has become familiar with programs in other areas, particularly the Northwest, that are of equal significance. Only those situations have been described, however, that were instrumental in developing the author's thinking at the time the study was made.

In the course of the study, the author was able to visit a number of schools that have made steps in the direction explored in this volume. Professor Hamden L. Forkner was extremely helpful in suggesting schools that might be taking such steps. The writer would also like to express his thanks to the following people who gave him freely of their time as he visited their schools: Leo F. Smith and Warren Davis of the Rochester Institute of Technology; Francis H. Wing and Ray Prosser of the Buffalo Public Schools; S. D. Mullikin and Fred Nicholson of the Henry Ford Trade School; Earl L. Bedell, Laurentine Collins, M. French, Stanley Dimond, and William E. Stirton of the Detroit Public Schools; Ralph Wenrich, Leon Waskin, Edgar Hardin, Julian W. Smith, and Edgar Grimm of the Michigan Department of Public Instruction; R. T. Craigo, John Butler, and H. K. Heikkinen of the Dunwoody Industrial Institute; Margaret Andrews of the Minneapolis Public Schools; R. W. Tarbell, Messrs. Knudson, Karpowitz, Shurok, and Brazier, and Mrs. Schiele of the Milwaukee Vocational School; Walter Nichols, F. W. Ziegenhagen, and Olga Schlueter of the Milwaukee Public Schools; Charles M. MacConnell and Theodore Case of the Evanston Township High School; Paul R. Pierce, Cora Scotten, and Maurice Paton of the Wells High School in Chicago; D. C. Ellinger of the Connelley Trade School in Pittsburgh; Locke James and Horton Amidon of the Farmingdale Agricultural Institute on Long Island; Hugh Flaherty and Messrs. Aungst and Reid of the Sewanhaka High School in Floral Park, New York; Thomas S. Marshall and Rudolf Skrivanek of the Essex County Vocational Schools; Leo Blumenfeld of the Central High School of Needle Trades in New York City, and Edward Berman of the Bayonne, New Jersey, Vocational School. Several of these men and women did not agree with the writer's thesis, but many of their practices are reported in the pages that follow.

MILTON J. GOLD

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Working to Learn

CHAPTER I

Introduction

A NUMBER of curriculum workshops, state and city school systems, and national educational associations are focusing attention upon the broad foundations of the secondary school curriculum. The focus has shifted from improvement in the "teaching" of specific subjects and from addition of new agencies and activities to a thoroughgoing attack upon the nature of the curriculum itself. A virulent skepticism has sprung up as to the adequacy of a program that was originally designed as preparation of a few for college when applied to education of the many for life. And as that skepticism has found nourishment in evidence of the failure of the old curriculum, a realization has dawned upon educators that attempts to patch up the old program would be futile without fundamental reconsideration of secondary education.

1. Serving America's Youth

In the last years of the depression of the Thirties, the plight of youth who made up a disproportionate share of the unemployed led to surveys of secondary education and youth problems on a scale and in a critical temper not evidenced previously. The Regents' Inquiry into the Cost and Character of Education in the State of New York centered its attention on the outcomes of school instruction. The Inquiry found the schools seriously ineffectual in the preparation they were providing for citizenship and vocational, social, and personal adjustment.[1] The American Youth Commission made a comprehensive survey of youth in Maryland, discovered large numbers of youth out of school and out of work, revealed failures of schools to prepare their students for work life or leisure pursuits, for citizenship and family activities.[2] In the present decade, a committee of the faculty of Harvard University has examined the educational program of secondary schools and concluded that these schools are not serving to tie the youth of the land together in a common understanding of their heritage and of one another as a necessary basis for the common life.[3]

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[1] On the Regents' Inquiry, see particularly: Francis T. Spaulding, *High School and Life* (New York, McGraw-Hill, 1938); Thomas L. Norton, *Education for Work* (New York, McGraw-Hill, 1938); and Ruth E. Eckert and Thomas O. Marshall, *When Youth Leave School* (New York, McGraw-Hill, 1938).

A. DEVELOPING FUNCTIONAL PROGRAMS

Meanwhile, experimentation has been going on in various places to develop a program that will be better suited to the needs of all youth. By and large, two concepts dominate these experiments: first, that the primary function of the school is to help the student achieve his maximum personal development, and second, that the school must serve the function of preparing youth for the common life in American society with allegiance to the ideals of our culture. The emphasis is on a general education and on an education which will be directly functional in the life of the maturing adolescent.

The most notable experiments on the secondary level have been the Eight-Year Study, sponsored by the Progressive Education Association in thirty schools and school systems in the North and West,[4] and the Southern Association Study, sponsored by the Southern Association in thirty-three schools in eleven Southeastern states.[5] In each case the cooperating schools were released from meeting college entrance requirements stated in terms of specific subject matter, and they were free to reorganize their programs in any way they saw fit. The schools, then, proceeded to work out their own curricula under local autonomy yet under guidance of the central staff of the study. In each study many of the cooperating schools moved away from the traditional subject organization and toward curricula that tended to place man's social functions or the problems of adolescence at the heart of the school program. Subject matter ceased to be an end in itself and became a resource to be called upon as students and their teachers went about the solution of problems significant to them. Both studies made large-scale evaluations of the results of their experiments and found significant evidence in favor of the more functional programs.

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[2] On the American Youth Commission, see particularly: Howard M. Bell, *Youth Tell Their Story* (Washington, D. C., American Council on Education, 1938); Howard M. Bell, *Matching Youth and Jobs* (Washington, D. C., American Council on Education, 1940; and American Youth Commission, *Youth and the Future* (Washington, D. C., American Council on Education, 1942).

[3] Harvard Committee, *General Education in a Free Society* (Cambridge, Harvard University Press, 1945).

[4] See *Adventure in Education* (New York, Harper, 1942–1943, 5 Vol.), and in particular: W. M. Aikin, *The Story of the Eight-Year Study*, Vol. I, 1942; Dean Chamberlin and others, *Did They Succeed in College?*, Vol. IV, 1942; *Thirty Schools Tell Their Story*, Vol. V, 1943.

[5] F. C. Jenkyns and others, "Cooperative Study for the Improvement of Education," *Southern Association Quarterly* (February and August 1946), X, 9–132 and 372–488.

In addition to the experimenting that was being done, theoretical formulations were published by the Harvard Committee, the National Education Association,[6] and the North Central Association of Colleges and Secondary Schools,[7] among others. All were concerned with the problem of general education—the common program designed for all youth, a reaction against the free elective system that tended to be more of a divisive than a cementing force in education. Agreeing in general on the need for such a program and even on the objectives to be sought, the groups divided on the method of approach. The Harvard Committee presented a program that was substantially a rephrasing of the traditional subject-centered approach that smacked of the dominance of the academic disciplines. The other committees agreed in advocacy of a program much employed by many schools participating in the Eight-Year and Southern Association studies. They espoused the institution of a "core" program, placing social functions and the personal concerns of the learners at the center of the curriculum, and cutting across subject lines in an emphasis on the functions of education rather than on any specific content.

B. GENERAL EDUCATION EMPHASES

By and large, it may be seen, all groups were convinced of the need for a general education program at the heart of the curriculum. This general program had two functions: it was to include the "common learnings" aspect of the curriculum—those learnings which would meet the needs of all pupils and which were not differentiated according to vocational aim or special interests of any kind; it was to serve as a uniting element in a diverse culture, to tie together pupils with differing interests, goals, and backgrounds so that they might live a harmonious life together both in school and as adults and citizens. The methods proposed to accomplish this general education included the following: (1) greater attention to the classics as a common heritage, (2) a course of "constants" that prescribed study of the traditional subjects by all students for half the school day, (3) introduction of social studies "cores" which postulated citizenship as the unifying factor in life, and (4) organization around the "persistent life situations" that children, youth, and adults face in their daily living.

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[6] National Education Association, Educational Policies Commission, *Education for ALL American Youth* (Washington, D. C., The Association, 1944).

[7] North Central Association, Committee on General Education, *General Education in the American High School* (Chicago, Scott, Foresman, 1942).

At the same time there had been increasing criticism of the content-centered curriculum of the secondary school. Much of the content had originally been included not for any inherent values but because it was supposed to facilitate learning in college, to which the secondary programs had been subordinated. The new high school population, however, sent only one-sixth of its entrants and only one-third of its graduates to college.[8] The conclusion followed, therefore, that the secondary curriculum would have to have its own *raison d'être*, that it would have to help students solve their current problems and prepare for adult living, not merely for more formal education. Furthermore, studies had shown that the values desired (citizenship, social attitudes, vocational adjustment, health habits, etc.) were not to be achieved effectively through an indirect approach that stressed academic disciplines chiefly, but that direct attention would have to be given to these values as the functions of education.

In arriving at these conclusions, the secondary school had available the experience of many elementary schools which had already made a comparable shift in emphasis from content mastery to personal development. The elementary schools had had a longer history as the nation's common school, and the development of a theory of experience had been put to use in a curriculum that placed the learner and his experience at the center of the school program. But while the play activities of the child might serve as the center of the activity movement in the elementary schools, the secondary schools would have to find something more substantial, something more closely related to the demands of the adult world which their students were about to enter. Educators faced the problem of fixing on those activities for the general education program which (1) were the common elements of life binding society together, (2) met the demands of an adult society and built allegiance to the ideals of the culture, and (3) would still be functional in the lives of adolescents who necessarily put their own developmental tasks first. In an attempt to meet these three criteria, newer programs have tended to center their attention on man's social functions—his daily dealings with other people—and the problems of adolescence that have significance in adult life.

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[8] W. L. Warner, R. J. Havighurst, and M. B. Loeb, *Who Shall Be Educated?* (New York, Harper, 1944), Table I, p. 51.

C. THE WORK-EDUCATION DICHOTOMY

Unfortunately, these programs tended to isolate vocational activities as "specialization," finding general education in non-vocational studies alone. In this they reflected the traditional dichotomy between work and education which has regarded the one as routinizing and degrading, and only the other as uplifting and "liberalizing." While the social-functions and adolescent-problems approaches represented an advance over the sterile subject-centered organization, they often continued the old tradition of studying about, rather than participating in, life activities. More important, they tended to overlook the significance of work as a common denominator and to see only the specializing and fractionating influence that a great diversity of occupations might have. As a result they tended to relegate occupational activities still deeper into limbo, prolonging the infancy of youth by denying him useful participation in service to his community. They started from the valid observation that social interaction is the common activity of mankind, but influenced by the traditional attitude toward work they overlooked the equally important observation that the primary mode of social interaction is productive enterprise.

The release of atomic power that was finally achieved in 1945 represented a striking result of two aspects of human life: the social use of intelligence to remake the environment, and the development of a science that had sprung from the work men do. In the history of the world, man, like many animals, had to work, had to remake his environment, in order to survive. Thorstein Veblen found that man was "an agent, not an absorbent," and that from many millenia of this type of reaction he had developed an "instinct of workmanship":

> The adaptation to the environment which the situation enforced was of an industrial kind; it required man to achieve facility in shaping things and situations for human use. . . .
>
> Early man was a member of a group which depended for its survival on the industrial efficiency of its members and on their singleness of purpose in making use of material means at hand.[9]

Man had been born into a world in which existence was at best precarious. But it was a world in which things were not all fixed. William James called it a "universe with the lid off." As a result man could do something to make the goods of existence more secure and the evils less menacing.[10] What he did we now know as work. And from that work have come not only the material results we are familiar with, but the arts and sciences and social institutions basic to our culture. Dewey says:

> In and through work they [men] have mastered nature, they have protected and enriched the conditions of their own life, they have awakened to the sense of their own powers—have been led to invent, to plan, and to rejoice in the acquisition of skill.[11]

Genuine art grows out of the work of the artisan. "The art of the Renaissance was great, because it grew out of the manual arts of life."[12] Yet not through routine work alone, but through the application of intelligence to his daily toil was man's heritage built.

All we had to do, then, was to look about us and find in this most prevalent form of human activity the core of our general education program. As work has functioned to develop man's arts, skills, and institutions, so it might well function to develop the individual, his personality, skills, attitudes, and knowledge—if the school would guide the application of intelligence to current work activities. That is the thesis of this study. Participation in representative occupations and study of their influences on our arts and social institutions is suggested as the *content* of the school's general education, and it is also advocated as the *method* for achieving goals in citizenship, home membership, learning tools, health, vocational adjustment, ethical development, leisure-time education. Occupational education is seen as a logical extension of the experience curriculum to the secondary school.

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[9] Thorstein Veblen, "The Instinct of Workmanship and the Irksomeness of Labor," *American Journal of Sociology* (September 1898), IV, 194.

[10] See exposition of experimentalist view of universe in J. L. Childs, *Education and the Philosophy of Experimentalism* (New York, Appleton-Century-Crofts, Inc., 1931), pp. 53–61.

[11] John Dewey, *The School and the Child*, edited by J. L. Findlay (London, Blackie and Son, 1907), p. 86.

[12] John Dewey, *School and Society* (Chicago, University of Chicago Press, 1900), p. 103.

2. The Organization of This Study

The concept of occupational education set forth in these pages is based substantially on the theory of experience which James, Dewey, and their followers built, on successful application of this theory in elementary schools, and on indications of the need for change in the secondary school. In order to build an appropriate foundation for the theory of education which is set forth, a comprehensive statement of the theory is deferred until Chapter V. In Chapter II the activity movement in the elementary school and its underlying philosophy are discussed. Chapter III presents the role of the high school in historical perspective and the objectives of the high school in the areas of personal development and social goals. Efforts to make the secondary curriculum attain these goals more directly are described in Chapter IV. With the psychological and social foundations of the secondary curriculum before us, and with a view of the conventional and more functional programs, we then go on in Chapter V to examine the concept of occupational education.

Chapters VI and VII present efforts that have been made in foreign schools and in America to apply occupational concepts. Chapter VIII draws on these programs to present those experiences most promising for an occupational curriculum in the present American culture. Last, Chapter IX organizes these experiences into a sample curriculum so that the reader may have a more concrete picture of the proposal.

CHAPTER II

Functionalism in the Elementary School

In the half-century since the foundation of the Laboratory School at the University of Chicago, the activity program that Dewey popularized has achieved acceptance in many schools, large and small, in the United States. Accepting this program, schoolmen have also taken up a philosophy of education which regards experience as the means of learning, improved conduct in meeting life's needs as the goal of learning, and the social milieu as the theater in which learning takes place. Such educators now regard books, factual knowledge, and individual studying as means, not ends, in the learning process.

In elementary and secondary school alike this philosophy has been given widespread allegiance; yet it has been the elementary school alone which has found effective means of putting these theories into practice. The reasons for earlier adoption in the elementary school of a functional program are not far to seek. The elementary school has had a longer history as the country's common school. Before the first world war, considerably less than half of America's youth entered high school. The high school was a specialized institution preparing a majority of its students for actual college attendance. The school did not help students meet their current problems, but in a quite literal sense the high school studies did help prepare them for their future years. To this extent, at least, the program was functional in the lives of the students.

On the other hand, the elementary school, while part of the educational ladder, had to concern itself with the majority of its students who were not even going on to high school, not to mention college. The lower school enrolled the mass of the country's children. It had to find an educational program which would be equally suitable for all the children and which could serve as a foundation for future learnings, either inside academic cloisters or out in a working world where people faced the problems of daily life. With the mass of the children enrolled in the lower school, and with the education of most children ending there, it is not strange that the concern for an education directly functional in life was concentrated in the elementary field.

The fruit of the work done in elementary education in the last fifty years may well nourish the efforts of those concerned with secondary programs, now that the secondary school, too, has become part of the country's common educational system. Universal secondary school attendance has been achieved in many cities and in some states, and with it have come the problems that elementary education has long faced. Justification has ceased to exist for a program whose chief function was preparation for college. If the high schools are to offer a general program for the general public, they will have to find a content and methodology that will be of functional value in the lives of their students and in the supporting society. Moreover, identification as part of the common school system makes it apparent that the secondary school must orient its program toward its "sister" common school rather than toward the college, a selective institution.

1. The Activity Movement in the Elementary School

A functional concept has always been strong in the elementary school. The traditional three R's program was designed to supplement the educational activities of the home and church in days when the home provided a richer learning environment and the church was a stronger influence than it is today. Still, the program was conceived in terms of what adults wanted children to learn, with little concern for the children's problems, interests, and needs. Knowledge, it was assumed, could be poured into the child, and the child who was not perverse would absorb the knowledge and automatically convert it into desirable behavior. The program was functional, but from an adult point of view only.

Efforts to introduce learning that would function in the children's lives while preparing them for future demands have a long history. Lois C. Mossman carries such attempts back to Erasmus's observation that knowledge of things is more important than knowledge of words. The development of sense realism and object teaching, Rousseau's concern for the natural interests of the child, Herbart's doctrine of interest, and Froebel's principle of self-activity are viewed as paving the way for the activity movement which swept American elementary education in the first third of the current century.[1]

In America, Dewey, through his Laboratory School in Chicago and his numerous publications, gave impetus to what was subsequently called the activity program. Education was a process of reconstructing one's experience, not a ritual for inscribing the cultural heritage on a *tabula rasa* that represented the child. It was an active process in which the child's creative assimilation of experience was the key factor. As such, it involved the total behavior of the child, not his mental life alone. Learning could not be highly departmentalized but must instead center around activities in which the child was interested. And the child was interested in those things that helped him solve his problems, satisfy his needs and drives. The program emphasized, therefore, the total child, learning by doing, placing the child's needs at the center of the program, providing considerable diversity in learning activities, and giving the child greater freedom so that he might attain his goals.[2]

In effect the program was characterized by revolt against many formalistic features of the existing pattern that often aroused excesses of negativism, and by a number of constructive innovations. Teacher domination of the classroom situation, verbalism, textbook mastery, and literal recitation of a text were the bugaboos of the "new education." In their place the innovators put experiential learning, constructive discipline that aimed at guided self-control rather than imposed conformity, a "success program" that would provide opportunities for achievement and self-expression for all, and socialized classroom and school procedures.[3]

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[1] Lois C. Mossman, *The Activity Concept* (New York, Macmillan, 1940), pp. 177–84.

[2] Selected from: Mossman, *op. cit.* I. B. Berkson, *Education Faces the Future* (New York, Harper, 1943), pp. 146–47. Hollis L. Caswell, *Education in the Elementary School* (New York, American Book Co., 1942), pp. 195–96. W. H. Kilpatrick, "Definitions of the Activity Movement," in National Society for the Study of Education, *Thirty-third Yearbook*, Part II, pp. 47–55. J. W. Wrightstone, *Appraisal of Newer Elementary School Practices* (New York, Teachers College, Columbia University, 1938), p. 43.

To meet these goals, classroom activities had to be immensely more varied and more closely related to daily experiences of the children than ever before. In the process, play became a respected partner of the primer and blackboard as a learning medium. A search was instituted for realistic activities that would facilitate mastery of the tool subjects through jobs important to the children rather than through repetitive drill. In the class, emphasis was put on being busy at tasks the children felt were worth while rather than on being quiet. The teacher ceased to be the hearer of recitations and became the guide and leader in planning activities and discussing their performance. Pupil and teacher shared in the selection and prosecution of learning activities; schedules became flexible enough to permit visits to educative resources found in the community.[4] Reading was discovered to depend upon prior accumulation of experience that would make symbols meaningful—and those experiences became the center of a reading readiness program that preceded actual efforts to learn directly to read. Knowledge had to be reorganized around functional centers—Melvin's ten modes of human activity,[5] for example, or Mossman's ten fundamental processes of living.[6] The academic disciplines were no adequate organization for children with problems to solve.

In the thirty years following the foundation of the Laboratory School in Chicago, the activity movement found its chief application in a rather small number of private schools. In them the social meanings upon which Dewey had placed so much emphasis were largely neglected. As a result, Kilpatrick's evaluation of the activity movement in 1934 held that it was largely restricted to the "method" aspect of education and that it had to be complemented by a more adequate social theory.[7] Caswell, similarly, attacked a focus on the child which was too narrow in nature, a preoccupation with method, and the failure to recognize "the significant role of the culture and function of social ideals and conditions in determining the direction in which the educational program moves."[8]

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[3] New York State Department of Education, *The Activity Program* (Albany, The Department, 1941), pp. 19-21.

[4] *Ibid.*, pp. 22-23.

[5] A. Gordon Melvin, *The Activated Curriculum* (New York, John Day, 1939), p. 86.

[6] Mossman, *op. cit.*, p. 55.

[7] Kilpatrick, *op. cit.*, p. 64.

Yet interest in the activity program had spread, and with it a growing consciousness of social values that led to the later emphasis on social functions. Thus, when city, county, and state systems began to incorporate activity concepts into their programs, they did so without the stress on individualism and neglect of social values that had been found objectionable in the early patterns. This is a notable feature of the Virginia, Mississippi, and Florida state programs that grew in the Thirties under the influence of Caswell, Campbell, Harap, and others. In the Thirties, too, a wider adoption of the activity concept took place. California's State Education Department started publishing the new gospel in 1930; in 1933 Newark, New Jersey, formally adopted the program. Seventy schools joined in the experimental phase of New York City's program from 1935 to 1941. Evaluation in 1941 disclosed significant advances over the conventional program, and the newer practices were extended to all the elementary schools in the city soon thereafter. At present there seems little doubt that the activity program, with great variety in pattern, represents the dominant trend in American elementary education.

2. The Underlying Philosophy

A primary target for criticism of the activity movement in action was the preoccupation of many of its exponents with method. Yet the substance of the new program lay not in its methodology but in its fundamental reconsideration of the educational process. In our effort to discover a functional framework for the secondary school, we will find the chief significance of the elementary "revolution" in the underlying philosophy and psychology.

A. BEHAVIOR AS ADJUSTMENT

Kilpatrick points out, "What we now call the activity movement is the effort to bring together the democratic regard for personality, the biological psychology of James and Dewey, and the experimentalist outlook in general."[9] The work of Darwin made clear the close relationship of man and other animals. Life is characterized by activity—behavior. Behavior involves an adjustment of the organism to the environment in the nature of an interacting relationship of the two. The organism is moved to activity because of disequilibria or tensions set up either by its own needs and drives or by the demands of the environment. In all cases it tends to work toward a new equilibrium, toward a new integration of knowledge and patterns of action. The active process of achieving a new equilibrium, a new integration, may be characterized as learning. Without adjustive behavior, without the integration of new patterns of action, there is no learning.

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[8] Caswell, *op. cit.*, p. 196.

[9] W. H. Kilpatrick, "Foreword," in Mossman, *op. cit.*, p. xiv.

B. BEHAVIOR AND THE ORGANISM'S NEEDS

Behavior is always selective in nature. The human being participates in those activities that are of deep concern to him; he selects those responses that help him restore disturbed equilibria, that help him fulfill his need and purposes. Behavior is viewed as resulting from a "press" or "valences" in the environment acting upon tensions, drives, or propensities in the individual. In this situation there is a tendency to work toward an end, goal, or closure.

With this basic idea, various authors have set up diverse categories of needs. Perhaps the most fruitful for the educator is Prescott's division into physiological, social, and ego needs. The first involves needs for physical maintenance; the second includes requirements for security, a sense of belongingness, affection, and acceptance by a social group; the third necessitates contact and harmony with reality, progressive symbolization, a favorable ratio of success to failure, a sense of selfhood.[10]

For the educator significance lies in the realization that some needs are fundamental and basic, lying within the personality yet subject to the pressure of the environment. Since these needs are basic, their satisfaction takes precedence over such things as school-imposed tasks. Learning takes place only insofar as it makes use of the "psychical energies" involved in discharging tensions created by these needs.

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[10] Daniel A. Prescott, *Emotion and the Educative Process* (Washington, D. C., American Council on Education, 1938), Chapter VI.

C. BEHAVIOR AND THE SOCIAL ENVIRONMENT

The environment is not purely physical but social as well. In animals, as in humans, gestures are made by the organism as it comes into contact with others of like or different species. In man these gestures somehow have emerged into what George Mead calls "significant symbols," gestures that carry the same meaning for the gesturer as they do for his correspondent; and through language man has developed consciousness of self and of others and the aspect of behavior we call "mind." Mind and reason are not pre-experiential, not given *a priori*, not divinely bestowed, but spun of experience, the social process, and the development of consciousness of self and others.[11] Living and thinking are highly interdependent:

> Since experience is in and of the world of men and things, our minds are also continuous with these objective materials. Had our environments been different, our experiences would have been different. In short, to live differently is to think differently.[12]

D. SYMBOLS AND "TRANSFER"

Thought cannot arise without the experience that evokes it, nor be effective without being tested in action. On the other hand, experiences that have not been conceptualized, generalized, offer no carry-over to other experiences and therefore no learning. Thinking depends on the use of symbols and language, for through them the consequences of an action may be summoned up in advance of the overt act and its overt consequences. These symbols, too, make it possible to generalize experiences and thus to apply one experience to a second in the form of the generalization or symbol that stands for the earlier experience.

E. GENERALIZATION AND SUBJECT MATTER

As the individual builds his generalizations of experience, the race accomplishes the same feat in reducing its combined experience into classifications we regard as "subjects," as the organized cultural heritage. In order to save succeeding generations the trouble of redistilling this experience, these subjects are usually set in organized form before children and youth. But what meaning can these generalizations have for youngsters whose experiential background does not lend substance to the symbols employed? Rather, the individual takes from his environment what helps him to make necessary adjustments; he continuously "refines the logic" of his *own* experience. Indeed, Hopkins defines learning as "the progressive changes which the individual makes in the logic of his experience due to his increasingly purposeful efforts to resolve his own personal problems of living more intelligently." [13] Not initially, but eventually, does the learner arrive at the highly conceptualized and generalized bodies of knowledge that are now foisted upon children and adolescents who have no basis for assimilating them into their experience.

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[11] For a good discussion of this point of view, see W. H. Kilpatrick, *Selfhood and Civilization* (New York, Teachers College, Columbia University, 1941).

[12] John L. Childs, *Education and the Philosophy of Experimentalism* (New York, Appleton-Century-Crofts, Inc., 1931), p. 9.

F. THE IMPLICATIONS

Certain implications for education have been drawn from this philosophy of meaning and experience.

First, education is to be looked upon as a process of growth, as reconstruction of experience, as very much concerned with the *development* of a learner, not with the filling of a two-gallon jug. Learning is defined as changes wrought in the individual's personality as expressed in his behavior. While it is true that we learn by doing, we do not learn *what* we do;[14] rather, we learn what we *assimilate* in a highly selective manner. Learning and behavior are seen as a function of personality and environment interacting with each other. The role of the school, then, is a dual one; it must provide educative experiences; it must assist the growing individual to reconstruct and reorganize these experiences into a meaningful whole, with resultant generalizations that will determine his behavior pattern.

Second, only as the mind of the learner is active and as a genuine problem is faced does learning take place:

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[13] L. Thomas Hopkins, *Interaction: The Democratic Process* (Boston, D. C. Heath, 1941), p. 140.

[14] E. R. Guthrie, "Conditioning," in National Society for the Study of Education *Forty-first Yearbook*, Part II, p. 24.

> Action is response; it is adaptation, adjustment. There is no such thing as sheer self-activity possible—because all activity takes place in a medium, in a situation, and with reference to its conditions. . . . All depends upon the activity which the mind itself undergoes in responding to what is presented from without.[15]

Activity in a problem situation is the cue to learning:

> The adjustment of habits to ends, through the medium of a problematic, doubtful, precarious situation, is the structural form upon which present intelligence and emotion are built.[16]

Neither subject matter nor a "logic of experience" can be given ready-made; they develop as the learner goes about solving his problems.

Behavior, while drawing on adjustive mechanisms learned in the past, is goal-directed. To borrow Murray's term, it is both "a push from the past" and "a pull from the future." [17] Learning takes place in response to motives, according to Guthrie; when the individual's equilibrium is disturbed, according to Dewey; when "valences" in the environment acting upon the "needs" of the individual set up "tensions," according to Lewin.

The goals that are set and the problem solutions deemed acceptable correspond to the level of aspiration of the individual.[18] Similarity may be seen between this idea, Thorndike's "readiness," and studies of growth of interests. Since learning is goal-directed, it is selective, the organism selecting only those things which it can "afford to." Goals are selected in terms of interests which develop originally from needs but which eventually become independent of original needs and assert an autonomy of their own in directing behavior.[19] These interests are socially conditioned; they are learned, not innate. Yet they reflect the developmental pace of the individual, and certain aspects dominate at any one time because they are pre-eminent at that point in the organism's maturation.[20] At the same time as the level of aspiration (or readiness) of the individual is influenced by these interests, it is also subject to the code of the individual's social group and to previous success and failure experiences which have been found to raise and lower respectively the aspirational level.[21] Because of the influence of success and failure on the level of aspiration, the product of learning has significant effect upon the process of learning.

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[15] John Dewey, *The Child and the Curriculum* (Chicago, University of Chicago Press, 1902), p. 39.

[16] From *Philosophy and Civilization* (p. 187), by John Dewey. Copyright, 1931, by John Dewey. Courtesy of G. P. Putnam's Sons.

[17] Henry A. Murray and others, *Explorations in Personality* (New York, Oxford University Press, 1938), pp. 70–71.

[18] Kurt Lewin, *A Dynamic Theory of Personality*, translated by D. K. Adams and K. E. Zener (New York, McGraw-Hill, 1935). Reports of experiments by Hoppe, Frank, Jucknat, Fajans, and Rosenfeld.

[19] Gordon W. Allport, *Personality: A Psychological Interpretation* (New York, Henry Holt, 1937), pp. 90–102.

Third, honest consideration has to be given to the "whole" learner—to his affective and volitional qualities as well as to perception and cognition. Mind is not separate from the body and its emotions, but an aspect of total behavior. Emotional concomitants of learning determine attitudes, ideals, appreciations. Persistent unsolved problems of the learner, not the concerns of teacher or course of study, have prior claim on his attention. If the membrane that separates the personality from the environment is to be permeated so that learning may take place, the school will have to give heed to the problems and emotions that preoccupy the learner. It will have to aid the pupil to see the relatedness between school, home, play and work life. Consideration of the whole learner postulates that the school help the learner to integrate his experiences, to use his emotions wisely, to solve his problems, to reconstruct the logic of his experience so as to meet his needs more intelligently.

Fourth, the nature of language, consciousness and symbols must be given due recognition. As the child grows up in the social milieu, he learns language and consciousness of self and others. He learns to refer to things and events through the symbols which generalize them. The symbols make possible what Dewey calls "inovert action"—"doing" things in thought, anticipating consequences, reasoning. In the schools, however, the process has not been carried out without difficulties. Operations in which the meanings originated were isolated from the symbols, and the experimental method—trying things to observe their consequences—was often dropped when thought and "studying about" were substituted for overt doing. Although time was saved in the process, verbalization was sometimes mistaken for understanding—the use of symbols was mistaken for a grasp of the experience that the symbols stood for. In like manner, subject matter had been assumed to be transmissible without the prior experience which was indispensable if the symbols were to be truly significant. For the school it meant that experience would somehow have to be obtained if the symbols of science and language, the social studies, ethics, and art were to be meaningful. Moreover, it meant that if symbols or generalizations learned in one situation were to be applied to new situations, they would first need a genuine basis in experience. "Insight" into new situations would depend upon the quality of generalization of previous experience.

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[20] Arthur T. Jersild and others, *Child Development and the Curriculum* (New York, Teachers College, Columbia University, 1946), pp. 13–15.

[21] Lewin, experiments cited above.

Fifth, since language and consciousness are products of social interaction, the social milieu becomes increasingly important. Real-life situations, participation in the adult world, democratic relations in the school world are necessary to the development of meaningful symbols, and desirable habits and attitudes in a democracy. Participation in natural and social affairs is man's function in the world. A basic aim of education, then, is to help the learner "to develop the attitudes and habits, and to gain the mastery of techniques which will serve to make that participation progressively more intelligent."[22] The role of group reinforcement in learning, the influence of the group in adopting a level of aspiration, the power of the group in setting ethical standards are brought into focus. The school needs to modify its old emphasis on the individual as an individual.

3. Evaluations of "Experience Education" in the Elementary School

So much for the philosophy of the movement. In the elementary school where the "experience" curriculum has been given reasonable trial, what are the findings?

Evaluation of the "new education" has taken two forms. First, to satisfy the doubters who felt that the "minimum essentials" were being neglected—that reading, writing, and arithmetic were becoming lost arts—many measurements were taken of pupil skills in the newer-type schools and compared with skill development in

[22] John L. Childs, *Education and the Philosophy of Experimentalism* (New York, Appleton-Century-Crofts, Inc., 1931), p. 9.

conventional schools where other variables in the situation were matched. Second, efforts were made to evaluate the new program in the light of the values which its exponents were trying particularly to attain.

Wrightstone, taking six communities varying in population from 6,000 to 328,000, paired experimental and conventional schools in each locality. He discovered that the pupils in the experimental schools were significantly superior to those in the control schools in reading, spelling, and language, and superior, but not with statistical significance, in arithmetic.[23] In the experimental phase of the New York City program, slight and conflicting differences were found between the two types of schools in the three R's program.[24] Pratt, Dunlap, and Cureton paired schools in Hawaii and found subject-matter achievement about the same in the experimental schools as in the control schools.[25] Summarizing studies made in Houston, the Lincoln School, Los Angeles, New York City, Roslyn, N. Y., and the findings of his own and Pistor's investigations, Wrightstone reports the newer program more effective in reading skills, arithmetic, language usage, spelling, and work-study habits with these exceptions: the regular program excelled in spelling in Houston and in reading skills in Roslyn; no difference was reported in spelling by Pistor, or in arithmetic in Houston and Roslyn.[26] He concludes:

> The evidence of growth in basic skills, both at the elementary and secondary levels, reveals clearly that in the modern curriculum these skills are achieved as thoroughly or better than in the conventional curriculum. This is true for the basic skills discussed in this chapter, namely, skills in reading, arithmetic, language, work-study, library, critical thinking, health, and personal-social relationships.[27]

More significant, however, are results found in those areas which the conventional program had left to chance and to which the newer pattern gave particular attention. Wrightstone, in his six-community study, found pupils in the experimental schools significantly superior in their understanding of current affairs and in their civic attitudes, and more honest on a self-marking test. He found reliable differences favoring students in the newer-type school in activities that involved self-initiation, experimenting, and leadership. Similarly, the experimentally trained pupils were superior in creative language and graphic arts. In obtaining and explaining facts they excelled significantly. They showed greater interest in tools, pets, library, exhibits, newspapers, magazines, drawing, and writing, but not quite so much interest in photography and plants. They rated higher in personal and social adjustment, and stood much higher in the physical fitness index (health habits) although they ranked slightly lower in possession of health information.[28]

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[23] J. Wayne Wrightstone, *Appraisal of Newer Elementary School Practices* (New York, Teachers College, Columbia University, 1938), pp. 203–04.

[24] New York State Department of Education, *op. cit.*, pp. 62–63 and 65.

[25] J. Paul Leonard and Alvin C. Eurich, *An Evaluation of Modern Education* (New York, D. Appleton-Century, 1942), p. 43.

[26] J. Wayne Wrightstone, "Growth in Basic Skills," in Leonard and Eurich, *An Evaluation of Modern Education*, pp. 155, 159, 162, 165.

[27] *Ibid.*, p. 177.

The New York City study finds significant superiority in the new-type program in civic attitudes and in the use of books to check conflicting data and to find answers to questions and solutions to problems. The development of critical thinking and the fostering of desirable social relationships were reported as fortes of the new program. In attitudes, significant differences were found in self-confidence, lack of subservience, and attitudes toward school practices. More reading, more club memberships, more reading for fun, wider radio interests were found in pupils attending newer-type schools. That teachers also benefited was indicated by increased professional activity and better knowledge of children: "The activity program probably makes teachers better acquainted with the child and gives them greater freedom and opportunity to treat each child individually." Pupils in activity schools were judged to like school better, find it more interesting, and tend more to carry its influence into life outside the school.[29]

Leonard and Eurich point to achievements in the field of attitudes, traditionally left to chance in the conventional school. Pointing first to studies indicating the lack of correlation between information and attitudes and the failure of social studies to correlate with desirable attitudes, they record studies made by Peterson and

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[28] Wrightstone, *Appraisal of Newer Elementary School Practices*, pp. 170, 175, 189, 199, 207–9.

[29] New York State Department of Education, *op. cit.*, pp. 70, 74, 78, 106, 132, 163.

Thurston on the effect of movies, by Louis Raths on the effect of field trips, and the classic Lewin "climate" experiments which have shown that the newer-type program can influence vital attitudes.[30]

The evidence that has been gathered on the newer program is impressive. Caswell points out, to reassure those who are concerned over the traditional three R's program, that the basic school skills are being mastered better than ever before.[31] In addition, important values are being achieved in the realm of social understanding, critical thinking, attitudes, personal and social relations, and personal development.

4. Implications for the Secondary School

On the basis of these accomplishments in the elementary school, what may be carried over into the high school?

First, a functional approach to content is indicated. The primary concern of the school is development of the learner, not inculcation of subject matter. The corollary is that a need arises to select and regroup the gleanings of our cultural heritage so that they will help the student face his daily problems more efficiently, while at the same time preparing him to meet social demands. The curriculum then revolves about the individual's functions and the processes of society rather than about academic disciplines.

Second, the high school may recognize that the basis of the educative process lies in meeting the developmental demands of the learner peculiar to his level of maturity and in satisfying the demands that society will make upon the individual. These are viewed as explicit functions of the school, not as concomitants of a program focused on academic disciplines.

Third, the activity program of the elementary school recommends these features for incorporation into a secondary school program: the unification of learnings that are now highly departmentalized, the use of projects that youth consider worth while as the mechanism for unification, and active student participation in the planning, performance, and evaluation of these projects.

In addition, there is special meaning for the secondary school in

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[30] Leonard and Eurich, *op. cit.*

[31] Caswell, *op. cit.*, p. 185.

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the theoretical implications drawn from the underlying theory of experience. Obviously the secondary school has to face, although not in exactly the same way as the elementary school, the problems that arise from (1) consideration of education as development, (2) the problem-solving and goal-directed nature of behavior and learning and their bearing on the level of aspiration, (3) attention to the "whole learner" and the integration of experience, (4) symbolization, generalization, and transfer of learning, and (5) the influence of the social milieu. Secondary school approaches to these problems will be discussed in the chapters that follow.

CHAPTER III

The Role of the Secondary School

Regardless of the effectiveness of an elementary program and its significance for secondary education, it would be fallacious indeed to presume that a pattern could be imposed upon the secondary school without a basic understanding of the historic role of that institution, of its function in the contemporary culture, and of the psychological factors involved in educating adolescents in our culture. To lay the basis for that understanding, this chapter will explore these areas and discuss their implications for a more functional program.

1. The Secondary School in Perspective

Historically the high school is a by-product of higher education and does not enter the stream of common education until comparatively recent times. Originally it had no function which would justify its existence as an independent and terminal institution, having been instituted to prepare students for college. The Latin grammar school of colonial times laid the groundwork for a college education that stressed ancient languages. The academy that followed was not conceived of as a common school, and it was not until 1874 that the Kalamazoo Case established the right of a public school district to maintain a secondary school as part of its common school system. At this point the college-preparatory and common-school traditions merged, and the history of American secondary institutions since then has been that of a servant trying to follow two masters.

The surge upward of common education inevitably brought efforts to seize control of the secondary curriculum and substitute for a program whose function was merely preparation for higher education a program that would function directly in the life of the times. Various proprietary "English" schools had begun to operate in colonial cities early in the Eighteenth Century to purvey knowledge chiefly to would-be surveyors, navigators, and bookkeepers.[1] Franklin attempted to combine the prevailing tendency of the private schools to offer ultilitarian subjects for vocational purposes with classical languages for college preparation in his proposal for an academy in 1749. It was not long, however, before even Franklin had to complain of his own protégé, for the college-preparatory tradition was proving too strong and the "English" division of the academy was being subordinated to the "Latin" division.[2]

With the surrender of the academy to the "cultural" tradition, the next challenge came in the form of the English high school in its 1821 Boston prototype. Democratic forces had begun to demand a secondary school that would provide, at public expense, a more useful education for children who had completed their elementary education. "The public high school appeared to meet this demand and to overcome the growing undemocratic and 'class' character of the academies," according to Butts.[3] English, mathematics, and social studies of a practical nature were the main stress of a new three-year course for boys of twelve or older who were not preparing for college entrance.

At about the same time as the new high schools were opening, the manual training movement was imported from Fellenberg's Institute at Hofwyl by William McClure and Joseph Neef, who organized a society for spreading this new gospel in 1831.[4] Many academies took up the idea and tried to combine farming or industrial work with regular study. The strength of the academic tradition was once again too great, however, and the movement declined rapidly in the 1850's.

Meanwhile, the high schools too began to succumb to the academic routine. After the Civil War public high schools began rapidly to outstrip the private academies in enrollment. As they did, there was a tendency toward a tremendous proliferation of courses and the introduction of the new sciences and vocational or utilitarian subjects. Again, however, the old tradition asserted itself and the colleges recaptured control of the secondary schools as national committees (the Committee of Ten, 1892–93; the College Entrance Examination Board, 1899 and thereafter) began to set standards which high schools would have to meet if their students were to be admitted to colleges. These standards differed little from preparation that might have been necessary for entrance to colonial colleges, save for increased respect for the vernacular. The high schools which had originally been designed for non-college entrants, having replaced the academies, had themselves become primarily college-preparatory institutions.

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[1] Stuart G. Noble, *A History of American Education* (New York, Rinehart, 1938), p. 70.

[2] R. Freeman Butts, *A Cultural History of Education* (New York, McGraw-Hill, 1947), pp. 376–78.

[3] *Ibid.*, p. 489.

[4] *Ibid.*, p. 510.

Rapidly moving industrialization in the United States at the turn of the present century led to renewed demand for a more utilitarian secondary education. Again having despaired of reformation within existing institutions, educators turned to a new concept, the vocational school, securing for its establishment federal funds in the Smith-Hughes Act of 1917. For the first time in American public school history, the single-track, single-class tradition had been broken, and a system of two parallel secondary schools was set up. Here again the invidious distinction between work and education was made; the result might have been foreseen: parents wanted the "best" for their children, and that meant a "leisure class" education, not an education for work. The academic high school lost the opportunity it might have taken to vitalize its program with work activities; the vocational school became an arena for learning skills and subjects without depth or intellectual content, without stress on social and scientific meaning of the work performed.

Meanwhile, the Commission on Reorganization of Secondary Education had been formed by the National Education Association in 1911 and issued the famous *Cardinal Principles of Education* in 1918. The Cardinal Principles, although not repudiating the subject-organized approach to education, had as their chief significance an orientation that was functional rather than subject-centered, that was concerned with broader educational objectives rather than with college preparation alone. Attention was placed on objectives and life functions, such as citizenship, home membership, and vocational adjustment, rather than on the academic disciplines that had preoccupied the Committee of Ten. In the three decades since the Commission's report little has been done to reorient the secondary curriculum explicitly in the direction of the Cardinal Principles, but their statement may readily be viewed as the expression of a functional approach to education.

2. The Social Backdrop of the Secondary Curriculum

The functional approach started from the premise that education was a bi-polar process which involved a growing personality at one pole and at the other a society which inherited—and was inherited by—the individual. The approach to near-universal education on the secondary level has enforced upon the school a necessity to take stock of changes that have taken place in society which invalidate the "education for the ministry" goal of colonial America and the "education for adornment" objective of the century preceding the Civil War. The same forces which made universal education possible revolutionized a world's way of living —but not its schools!

A. THE WORLD OF INDUSTRY

The vast changes that have taken place in American industrial life since the founding of the Republic are too well known to need detailing here, but the effects of these changes are worth noting. The freehold farmer who constituted seven parts in eight of the American population in 1790 now represents 14.8 per cent of the population.[5] Free lands and the frontier have all but disappeared. In their place have risen the city whose heart is machine production and a mass of landless workers who operate the machines in whose economic control they play no part. The machine has also invaded the farm and made possible gigantic concentrations of ownership, sometimes dwarfing the medieval feudal baronies.

The basic revolution has been a thoroughgoing change in the nature of production. Wage-earning has become the major type of gainful employment (77.5% in private and government employment, 18.8% self-employed, 3.8 per cent unpaid family workers[6]). The worker—as a day laborer or a research scientist—rarely controls the duration of his employment and he is able to determine the conditions of employment only as he may achieve temporary bargaining advantage over the corporation that employs him through association with his fellow employees, or through possession of a scarce and special skill, or through general labor scarcity in times of full employment. The American Youth Commission regarded this trend toward a growing "proletariat" as a threat to social stability.[7]

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[5] U. S. Bureau of the Census, *Current Population Reports, Labor Force*, P-50, No. 3, Table 4 (Week of September 7-13, 1947) (Washington, D. C., The Bureau, January 21, 1948).

The instability predicated by the Youth Commission stems from other features of present employment conditions that are related to the rootlessness of wage-earning. Perhaps the most significant that the modern era has initiated have been the removal of production from the home, the rise of the factory system, and the division of labor. The result of the first has been the loss of an earlier integration of work and living, the social and productive phases of life. The second brought about increasing dependence upon the industrialist, the concentration of wealth, the loss of self-determinism of the worker, and the increased subjection of both worker and employer to the fluctuations of a business cycle resulting from continuous and intensified imbalance of supply and demand. The third, division of labor, resulted in diminishing the significance of a man's work, increased dependence upon the entrepreneur, increased monotony of the day's toil, and destruction of the skill hierachy with attendant loss of opportunity for economic and social advancement.

Of particular significance is the effect of these developments upon social mobility, since a strong case can be made for social mobility as a safety valve in a society where social distinctions are made. The stability of a society may be seen to rest upon the ease with which movement from stratum to stratum is made, making cohesion of the various strata possible and minimizing the need for violent rents in the social fabric. In the case of occupational advancement as a means to social advancement, a nullifying factor was introduced, according to Warner, in the break that took place in the skill hierarchy. As he studied the shoe factories in Newburyport, Warner discovered that it was no longer possible for a worker to start in a low-skilled job and progressively work up to higher-skilled ones. As a result, the worker's chance to enhance his prestige through his technical ability became very small. There was no hierarchy of mechanical skills through which an operative might progress as his abilities developed. In addition, there was the constant threat to the operative's security that the machine processes at which he had attained proficiency might be discontinued at any moment as a result of technological advances.[8] The high-skilled jobs still existing were to be found no longer in the factory, but in designing rooms, chemical laboratories, and the like. These jobs required special training which the factory operative could not obtain. And even the skilled workers no longer held the position of the master craftsmen of old, for their creations and inventions were no longer in their control but subject to disposal at the managerial level.[9]

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[6] *Ibid.*, Table 5.

[7] American Youth Commission, *Youth and the Future* (Washington, D. C., American Council on Education, 1942), p. 8.

With the disappearance of the skill hierarchy Warner associated the falling prestige of factory workers in "Yankee City." Their membership in cliques, associations, and other groups tended to be restricted more exclusively to lower class contacts than did the membership of non-factory employees otherwise in the same economic position. Moreover, as mechanization increased, the worker lost prestige in his own eyes as well as in the sight of the community.[10]

The break in the skill hierarchy was accompanied by an impoverishment of personal relations between worker and employer and even among workers themselves as machine processes made personal interaction more difficult in the factory. Thus, an obstacle to psychological security was introduced at the same time that economic security was being threatened. Speaking of the new industrial employee, Mayo views with alarm the

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[8] W. Lloyd Warner and J. O. Low, *The Social System of a Modern Factory* (New Haven, Yale University Press, 1947), pp. 76–80.

[9] *Ibid.*, pp. 82–83.

[10] *Ibid.*, Chapter IX.

> . . . loss of security and certainty in his actual living and in the background of his thinking. For all of us the feeling of security and certainty derives always from assured membership of a group. If this is lost, no monetary gain, no job guarantee can be sufficient compensation. Where groups change ceaselessly as jobs and mechanical processes change, the individual inevitably experiences a sense of void, of emptiness, where his fathers knew the joy of comradeship and security.[11]

In place of developing skill in a craft, the machine-age employee has to develop the ability to change from one job to another. General work habits and attitudes have come to mean more in vocational education than specific work skills.

But not only has the nature of work changed; the proportion of workers needed for manufacturing has decreased. As the machine increased productivity, it became possible for more people to engage in distributive and service trades than ever before. In the past half-century there has been a continuous increase in the proportion of professional workers, clerical assistants, technicians in factory and sub-professional employment, public service workers, and distributive trades employees. Manufacturing and farming have been losing their share of the gainfully employed; a marked change in occupational distribution may be seen in comparing the census figures for each of several decades.

Moreover, as the machine became more productive, it became possible to reduce the length of the work day and to stimulate the consumptive appetites of the public. The result of the latter Mumford darkly describes as "producing for the battlefield and the rubbish heap":

> The belief in the good life as the *goods* life came to fruition before the paleotechnic* complex had taken shape. This conception gave the machine its social goal and its justification. . . .
>
> In short, the machine came into our civilization, not to save man from the servitude to ignoble forms of work, but to make more widely possible the servitude to ignoble standards of consumption.[12]

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* In general, the nineteenth-century Industrial Revolution and the steam-power era.

[11] Elton Mayo, *The Social Problems of an Industrial Civilization* (Boston, Harvard University Press, 1945), p. 76.

[12] Lewis Mumford, *Technics and Civilization* (New York, Harcourt, Brace, 1934), pp. 105–06.

Even with these questionable standards of consumption, it was possible to increase the leisure time of man and to multiply the foibles upon which he might expend the compensation for his labor. As goods grew increasingly accessible through purchase, production by the individual of articles for his own use disappeared. Perhaps, indeed, the purchase of the article was more significant than the use of the article, for during depressions the unemployed have foregone the use of articles rather than make them for themselves.[13] At any rate, it seems ironic that the machine, which made leisure possible, also withdrew the motive for constructive use of leisure time.

These changes in production have affected youth in several ways. First, the beginner jobs which upon leaving school youth once filled while learning the trade have largely disappeared. These jobs have either been eliminated by the machine or have become full-time careers for adults on low subsistence levels. Second, vocational education has largely ceased to be regarded as a responsibility of the employer or of the trade, and apprenticeships have all but disappeared except in a few crafts where the primary objective is more the restriction of the labor force than the education of youth. Third, the problem of intelligent use of increased leisure time has grown, both as a result of the increased leisure of employed youth and as a result of the increased period of unemployment between leaving school and obtaining permanent employment that has followed the disappearance of beginner jobs. Fourth, concern for the future mental health of high school students predicates realistic orientation to the world of modern industry and consideration of the attainment of optimum satisfaction in that world.

Of particular significance to the schools, also, is the increasing importance of the school as an elevator in the shaft of social mobility. With the diminishing opportunity for upward movement through occupational performance, Warner looks to the school to provide that mobility which he finds necessary for social cohesion. Yet even in the public schools class distinctions make their effect felt as they are employed by school officers and learned by the students. Warner, Loeb, and Havighurst reveal that the school serves children of different classes in different ways. Differentiated curricula—"selective pathways to success"—reflect the social standing of the children's families. The standard of teaching is seen to decline as one goes from the Latin (upper class) to the General (lower class) Course. For the children of higher-status families "life begins in college," since the high school no longer provides the class training people of these positions once expected of it. "Life begins in high school" for the lower-middle and lower classes. "Informally, the school is an arena where the class distinctions can be learned and made by the children themselves, using as criteria the things they learn at home and from the school." [14]

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[13] *Youth and the Future*, pp. 260 ff.

Fear of the divisiveness of American culture is basic to the plea of the Harvard Committtee's Report for a more truly unifying general education. Havighurst suggests that the answer lies in an individualized program; the school should help those students rise in the scale who have the desire and ability to do so; it should help others find satisfaction through other methods than social climbing; it should contribute to raising the general standard of living of the lower economic groups to make mobility less necessary.[15] The preponderance of academic curricula and academic courses, and the rejection by parents of vocational courses for the abler students, would indicate that the schools have in the past reinforced predilections as to the school's function as a ladder. Yet in doing so they have encouraged a daydream which sets impossible goals for youth and results in frustration on the one hand and failure to achieve maximum adjustment to a suitable place in life on the other. Absence of provision for social and occupational adjustment of low and middle income groups and widespread neglect of such mundane things as the local standard of living would indicate failure of the schools to prepare students for a happy life on a level appropriate to their prospects.

B. THE FAMILY

Probably no institution has been more affected by a changing mode of production than the family, and in no sphere has there

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[14] W. Lloyd Warner, R. J. Havighurst and M. B. Loeb, *Who Shall Be Educated?* (New York, Harper, 1944), pp. 57–82.

[15] R. J. Havighurst, "The Issues Are Three–Social, Psychological and Educational," in North Central Association, *General Education in the American High School*, pp. 162–63.

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been greater unwillingness to recognize the change. Moving production away from the family hearth was perhaps the first of the centrifugal forces tearing major functions away from the home. But as closely related as production is to education (save in the schools!), it is no accident that education, too, moved out. Indeed, the public high school is viewed as a product of the Industrial Revolution.[16] As it became ever more profitable to sell people their entertainment, recreative activities also departed: time and money were to be spent in watching things being done by others rather than in engaging in productive hobbies or participating in recreation and entertainment of one's own in the home or its surroundings. The automobile and motion picture have, of course, accelerated the exodus. The trend seems to be in the direction of a home stripped of all functions save having children and rearing the very young.

Not only has the role of the home been narrowed, but the number of children in the average family has been materially reduced. In the Maryland youth survey, the average number of children desired was 2.7;[17] yet the youth expressing opinions came from families averaging more than five children each. In the Thirties, indeed, the birth rate was even lower than the expressed desire of Maryland youth. This reduced rate has had its effect upon both mothers and children.

With work divorced from the home and with the introduction of various labor-saving devices, the modern housewife finds her children her main family responsibility. As society takes over the rearing of children when they reach school age, the mother either faces loss of this function honestly and seeks other outlets for her productive drives or refuses to face the situation and clings to her role as mother beyond the degree that is wholesome either for herself or her children. "Parents," says Plant, "struggle against weaning even more insistently than do children." [18] Obviously, an education which trains mothers for an earlier, non-existent age is inadequate to the present situation which demands preparation of women for a useful life in which bearing and rearing children is an important but temporary interlude. The alternative is a breed of women that Dorothy Canfield Fisher excoriates in *Our Young Folks* as a league of shoppers who spend too much of their time shopping for too many articles of too little use.

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[16] George S. Counts, *Secondary Education and Industrialism* (Cambridge, Harvard University Press, 1929), pp. 22–24.

[17] Howard M. Bell, *Youth Tell Their Story* (Washington, D. C., American Council on Education, 1938), p. 36.

[18] James S. Plant, *Personality and the Cultural Pattern* (New York, Commonwealth Fund, 1937), p. 169.

The smaller family has influenced youth as well as parents, for youth may now enjoy the benefits of increased resources at their disposal, the same income having fewer mouths to feed. A result has been increased school attendance, a not unmixed blessing. Reduction of child labor under unwholesome conditions has been an undeniable boon, but corresponding reduction in the responsibility of youth and bars to his achievement of full maturity are also worthy of attention. Study after study in the depression years pointed out that school was no substitute for work: yet this substitution has come both as a result of the generosity of well-meaning parents and as a result of the scarcity of jobs for youth.

Plant points out that the family retains very important functions in the rearing of the young: it provides security and a sense of belonging for which no other institution can substitute: it serves as a testing ground for working out problems of authority: it provides an area of protected competition. Early "academic" experiences, the development of sex attitudes, and training in basic physical habits are part of the learnings traditionally acquired in the home.[19] Granted these functions, however, the family has apparently lost its place as the primary integrating agency of society. The task remains to find those things that have substituted for it to give unity and cohesion to social institutions.

C. THE STATE POLITIC

Just as the machine has introduced basic changes in the nature of work and the functions of the family, it has had pervasive effects in the area of government. Perhaps the greatest change in the activities of the state since the foundation of the Republic has been the wide expansion of governmental functions. That government which governed least would scarcely govern best in the era of the social-service state. Changed industrial relations have forced upon the state responsibility for the welfare of the needy, the education of minors and adults, arbitration between labor and management, the regulation of mammoth business enterprises, the underwriting of power and housing projects, and innumerable other functions. In many ways the interdependence of the modern state and industry has been demonstrated.

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[19] *Ibid.*, Chapter X.

But just as business and government have grown, government has come to involve large masses of people and to be influenced, too, by massed opinion in the form of "interest groups" of one kind or other. For good and for evil, lobbies are maintained to influence local and national legislatures. The individual is often submerged as a member of one of these interest groups—of a political party, a management association, a labor union, a consumers' organization, a veterans' league, or an educational commission. The citizen inherits the additional problem of distinguishing between public and special interest.

Moreover, attitudes toward government which were characteristic of American life in the past no longer find justification. Frederick Jackson Turner in *The Frontier in American History* has pointed to the close connection between the nature of frontier life and the undeveloped social conscience. In a very different world, marked by interdependence never known to the pioneer and by the entry of government into all phases of life, social consciousness becomes a necessity. In a society marked by great differences in social and economic position, as ours is, sensitivity to social issues becomes vital to the maintenance of democracy. Moreover, there has been a need for sensitivity to an ever-widening horizon. Local and national chauvinism begin to be seriously questioned in a generation that has suffered two world wars.

Perduring through these changed circumstances are basic documents and principles in our heritage which must somehow meet the demands of our times. States' rights, freedom to carry arms, freedom of religion, due process, and freedom to assemble have acquired new meanings in an era of minimum wage laws, mechanized armies, released time for religious education, governmental regulation of large-scale industry, and mass picketing. Interpretation of our basic doctrine and amendments to it reflects changing needs.

In a changed political life, the school has the obligation to adapt its program to changing needs. Students maturing into a political life that gives them control of their own state must be aware of those commitments which will determine the nature of their interpretation and amendment of basic doctrine. In place of a blind loyalty to the words of historic documents, the schools must develop values and loyalties to basic ideas that permit dynamic application of democratic concepts. Counts suggests a respect for personality and human worth, a belief in the brotherhood of man, loyalty to the scientific method and faith in the application of reason to the problems of man, and allegiance to the ideals of democracy and world peace.[20]

To these basic loyalties the school must add a full awareness of the interrelationships between the political and economic aspects of life. It is proposed later that participation in these spheres be employed as the basis for a functional understanding of each and for a sensitivity to social issues, the need for which has been outlined above.

D. LEISURE

As the Industrial Revolution increased productivity, it built up a new area in the average man's life—a considerable amount of leisure time. First, it moved over 70 per cent of the American population from the farm to the city, thus reducing the number of people who have traditionally worked the longest hours. Second, it reduced the hours of work from the six-day week and twelve-hour day (or worse) of a century ago to a reported 42.39-hour week in non-agricultural industries and a 54.79-hour week in agriculture in a sample summer week of 1947.[21] Third, it exempted an ever-increasing number from any employment whatever, in some cases giving them nothing to do with their time. The third group is youth of pre-employment ages, including those who are neither in school nor employed.

Meeting the problem in a characteristic way, the industrial world made a business of recreation and provided commercialized entertainment. The emphasis was on spectator activities; yet recreation is viewed as incomplete unless it provides relaxation on one hand and creative activities on the other.[22] Normally the recreation "business" has provided only the first feature, relaxation.

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[20] George S. Counts, *Education and the Promise of America* (New York, Macmillan, 1945), pp. 75–101.

[21] U. S. Bureau of the Census, *Current Population Reports, Labor Force*, P–57, No. 63, Table 9 (Week of July 6–12, 1947) (Washington, D. C., The Bureau).

Speaking of recreation involving active participation, Plant is highly critical of the effect of industrialism in America which pushes people toward standards of perfection even in leisure activities. "Recreation," he says, "should imply doing something we enjoy doing, what we like to do—a 'release' of something we wish to express." He sees conflict between the drive to perfection and the mere joy of doing. "We will never solve our leisure-time problems by adding new fields for perfection of results." [23]

Yet the American Youth Commission feels that human happiness depends upon building and substituting "freely chosen, spontaneously loved skills—manual, bodily, social, artistic, spiritual, or intellectual—for the older skills enforced upon humanity by necessity." [24] The need in recreation is to learn to protect free time from triviality and commercial exploitation, the Commission says.[25]

In a sense, then, leisure may be regarded as an "institution" of modern life, given birth to (for the multitude) and conditioned by modern industry, although not so well defined as work, the family, the school, or other institutions. To date it has been chiefly conceived as a negative thing—what remains after the necessary work of life has been done. A theory of society that finds its bases in the work men do and in social interaction will look to a constructive use of leisure time that provides for (1) enriched social relations, (2) expression of creative talents unrestricted by the hampering necessities that work imposes, and (3) relaxation to prevent work activities from warping the personality in a single direction.

E. THE SCHOOL

As the family has lost its educative, productive, and recreational functions, the community or state has taken them over. In some cases the state has taken over even the rearing of the very young, although these ventures have generally been considered unfruitful.

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[22] See C. G. Wrenn and D. L. Hartley, *Time on Their Hands* (Washington, D. C., American Council on Education, 1941).

[23] James S. Plant, *Personality and the Cultural Pattern* (New York, Commonwealth Fund, 1937), pp. 295 and 303.

[24] *Youth and the Future*, p. 284.

[25] *Ibid.*, p. 287.

Schools have assumed responsibilities that the family and master-craftsman once shared. Mammoth industries have taken over the family's role in production, and the community at large (the state) has been obliged to regulate relations more and more in a dehumanized industry that is not tempered by family kinship. Unemployment problems, relief for the sick, needy and aged—these too have passed on from industry and home to the community.

While the government assumes new functions, a major governmental agency—the public school—takes over a role once in the province of the family alone (when production took place at home), later the shared responsibility of family and industry. Traditionally, the school had served to educate those for whom preparation was to be found neither in home nor in industry. The Greeks and Romans trained a non-working class whose business it would be to rule; the medieval church schools and universities were chiefly interested in religious training, which they zealously guarded, and in the training of a clergy. As secular interests grew stronger and exerted their influence, repeated efforts were made to introduce subjects of a vocational nature into curricula, particularly in America and its new public schools. These efforts met with conspicuous failure as each new curriculum became weighted down with the learned lumber of the medieval "liberal arts." At one time there was no need to duplicate certain learnings, for they would come with the mother's milk or the blacksmith's bellows. But when home and forge failed to provide this education and a demand for it arose, the schools clung desperately to their conception of a "liberalizing" education (i.e., tradition), refusing to acknowledge that the world had changed and refusing to admit that discussion of contemporary problems might be just as liberalizing as study of ancient languages and cultures. As a result, Bell, writing in 1938, expressed the conviction that youth were "caught in the meshes of a complicated social machinery for which they have neither the background of experience nor the benefit of sufficiently realistic instruction to enable them to understand." [26]

The failure of the school to adjust to a radically changed culture has brought about those conditions that were indicted in the two comprehensive studies of school practices and outcomes in the late

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[26] Bell, *op. cit.*, p. 2.

Thirties. In place of facing the realities of the modern work world, most students were found to be leaving school either without plans for the future or with career objectives quite out of keeping with their abilities, training, and placement probabilities.[27]

> In the first place, lack of information seems to have been a vital factor. Pupils know little about business and industrial life before they leave school, they rarely come in contact with employers while they are in school, and few of them get vocational advice from any members of the school staff. Many pupils demonstrated their ignorance of the requirements of employers, and some showed clearly that they did not even know how to apply for jobs. They were not advised about future training which they might need, and many of them fell into the hands of racketeering schools.[28]

Even more important, reported Eckert and Marshall, *the school people did not view the vocational problem as their concern!*

> Many pupils graduated from general high schools with the feeling that they were not ready to begin work when they left school, that they had neither the information nor the skills which would help them to begin work. Employers agreed with the statements of these students, and added that the attitudes of many were such as to handicap them on their jobs.[29]

This should not be surprising in view of the finding that the occupations in which the former pupils of general high schools engaged immediately after leaving school were only slightly related to the courses they had pursued in school.

A failure to recognize the need for more generalized work training in a world in which the skill hierarchy is disappearing is indicated in Norton's criticism of the vocational program in New York State. There the curriculum is found to deal mainly with the skilled trades and to emphasize training for highly specialized occupations. Training for semi-skilled occupations has not been seriously considered, and a tendency is seen in some places to over-select and over-train youngsters beyond the entrance requirements of industry.[30]

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[27] See Howard M. Bell, *Matching Youth and Jobs* (Washington, D. C., American Council on Education, 1940); R. E. Eckert and T. O. Marshall, *When Youth Leave School* (New York, McGraw-Hill, 1938); and Thomas L. Norton, *Education for Work* (New York, McGraw-Hill, 1938).

[28] Eckert and Marshall, *op. cit.*, p. 259.

[29] Norton, *op. cit.*, p. 31.

[30] *Ibid.*, p. 74.

In the light of these findings the large percentage of drop-outs before graduation takes on added significance. In most cases withdrawals average 50 per cent; in the New York City study only 46 per cent of the entrants were found to graduate;[31] in Maryland only 43 per cent of the seventeen-year-olds and 24 per cent of the eighteen-year-olds were in school.[32] Stating their reasons for leaving school, 54 per cent of Maryland youth gave economic factors, 24.6 per cent lack of interest, only 13.2 per cent a feeling of completion upon leaving the last grade. Yet Bell feels that even at 24.6 per cent the lack-of-interest factor is understated, that many who attributed leaving to economic considerations meant really that the attraction of economic independence was far greater than that of the school program.[33] The obvious conclusion is that youth feel that the schools are not meeting their needs.

Elimination of the majority, failure, and a low level of achievement, says Dodds, are the result of a program which fails to meet the needs of the 30 to 40 per cent below the median intelligence group.[34] Sixty per cent, says Prosser, fail to achieve vocational adjustment through school activities which focus only on the 20 per cent going into professions and offices and the 20 per cent going into the skilled trades.[35] Hand points in addition to economic selection of the secondary group, citing a figure of $125 (pre-war) as the cash cost of attending purportedly free public high schools in several cities and noting the inability of a considerable number of parents to make such an outlay.[36]

The result, says Bell, is to diminish the effectiveness of the secondary school as an avenue of social mobility. He shows a clear relation between low income, large families, early marriage, and early withdrawal from school. In it he finds a "vicious circle of economic determinism," the

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[31] N. P. McGill and E. N. Matthews, *The Youth of New York City* (New York, Macmillan, 1940), p. 86.

[32] Bell, *Youth Tell Their Story*, p. 55.

[33] *Ibid.*, pp. 63–66.

[34] B. L. Dodds, "That All May Learn," National Association of Secondary-School Principals, *Bulletin* (November 1939), No. 85.

[35] "Prosser Resolution," reprinted in *Every Youth in High School—Life Adjustment Education for Each* (mimeographed, U. S. Office of Education, 1947), p. 5.

[36] Harold C. Hand, "America Must Have Genuinely Democratic High Schools," in North Central Association, *General Education in the American High School*, p. 19.

> suspicion that underneath the placid surface of our social scheme of things there operates a striking concurrence of social and economic forces that tends to freeze social levels and groups into a sort of perennial *status quo*.[37]

McGill and Matthews in New York City concur:

> One of the most serious aspects of the situation is that those who need schooling most are the ones that drop out. As a rule those from the most handicapped homes leave earliest. Although 42 per cent from white-collar homes had completed a high school course, only 20 per cent of the sons and daughters of manual workers had done so. Only about 1 in 10 Negro youth had finished high school. . . .[38]

But not only has the traditional program failed to prepare youth for the modern world of production and for democratic use of the socio-economic ladder, it has also been found wanting in the development of good citizenship, which it has stated as a chief objective. Leonard and Eurich have compiled studies attempting to discover correlations between social information, social attitudes, and the current social studies program. Rosander, Wrightstone, and the Regents' Inquiry report a *negative* correlation between the social studies and development of social attitudes, Koeninger a positive correlation. Rosander and the Regents report a negative correlation between information in the social studies and desirable attitudes, Wrightstone a slight positive correlation. Koeninger reports a lack of consistency in social attitudes in general.[39]

Perhaps the most sweeping indictment of the citizenship program of the schools is found in the Regents' Inquiry report. Spaulding finds high school graduates "seriously deficient in knowledge of problems, issues, and present day facts." As regards controversial issues, he finds students fundamentally conservative (accepting whatever is as right) and thinking in terms of catchwords and slogans. They express a general sense of the rights of citizens but do not recognize application in present-day situations. A social conscience lies dormant, as graduates are reluctant to assume responsibility for action that might involve personal effort or sacrifice.[40]

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[37] Bell, *Youth Tell Their Story*, p. 47.

[38] McGill and Matthews, *op. cit.*, p. 344.

[39] J. P. Leonard and A. C. Eurich, *An Evaluation of Modern Education* (New York, D. Appleton-Century, 1942), Table XIV.

[40] Francis T. Spaulding, *High School and Life* (New York, McGraw-Hill, 1938), pp. 18–25.

Speaking for the American Youth Commission, Rainey, too, assails youth's indifference to the ballot and other civic responsibilities. In the Commission's Survey, only 36.7 per cent of youth aged twenty-two, 60 per cent of the twenty-three-year-olds, and 66.9 per cent of the twenty-four-year-olds reported having voted in the 1936 presidential election.[41]

The clue is to be found in lip service to a functional objective and fundamental allegiance to a content-centered approach. "Many teachers," say Leonard and Eurich, "look on attitudes, interests and appreciations as intangibles which cannot be taught directly but which they nevertheless hope are being developed as *by-products of the main purpose of the school—instruction in subject-matter and study skills.*" [42] (Italics mine.)

Leisure-time activities also reflect inadequacies of a high school program not oriented to life functions. Wrenn and Hartley quite aptly label their report to the Youth Commission on leisure activities *Time on Their Hands.* McGill and Matthews in New York City report the amazing paucity of leisure-time interests of youth:

> Few, compared with the number that should, have any opportunity to engage in sports; few have any other fun or diversion than the movies; almost none have any organized or group interests. Very few are reached by the character-building organizations, and very few belong to any organization that has the advancement of the common good for an objective. Youth as a whole has little to do with the arts either as producer or consumer. Almost all the reading done is pastime reading and largely of an inferior kind. Only 19 per cent of the boys and only 11 per cent of the girls have a satisfactory leisure, measured from the point of view of a balanced ration.[43]

Resources for recreation, both in the sense of relaxation and as enrichment of living, have not been tapped in the education of our youth.

Yet whatever the failings of the present program in terms of acquaintance with the world of industry, social fluidity, citizenship, and leisure, at least some attention is given, albeit indirectly as a rule, to the problems. In the area of the home and family living, except for specialized courses in cooking, sewing and nursing (for girls only), practically nothing is done. It would be rash to attribute the rising number of broken families and the "quickie" marriages of the war to this failure of the school, but assuredly the school has done little to *improve* the quality of family living. Bell was able to report that youth still expressed almost unanimous confidence in the home as an institution, but Eckert and Marshall could only reveal that home was not the place where youth might be found.

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[41] Homer P. Rainey, "Foreword," in Bell, *Youth Tell Their Story.*

[42] Leonard and Eurich, *op. cit.,* pp. 82–83.

[43] McGill and Matthews, *op. cit.,* p. 350.

The character of the modern culture is seen to require, therefore, an understanding of modern industry and discovery of a place in it, provision for social mobility and an understanding of its significance, an awareness of the pervasive effects of the social-service state and a sensitive social conscience, an understanding of the role of the family and its changing function, and an ability to make constructive use of leisure time. Our current secondary program, organized around traditional academic disciplines, has been able to touch upon these areas tangentially only, if at all. The result has been failure to develop these areas and no notable success in the "subject" areas. A functional organization would provide for direct approach to these processes of living, making use of the academic disciplines as resources at those points where they had something explicit to offer. It is the thesis of this study that such a functional organization is to be found in occupational education.

3. The Individual: A Figure on the Ground of the Culture

Consideration of the culture has given us some light on the social objectives of the secondary school curriculum. The functional program must also take cognizance of the individual adolescent and his problems as an adolescent, in keeping with the view that learning involves both an individual and an environment.

Recent studies in anthropology and social psychology indicate that many of the problems we have customarily regarded as inherent in the nature of adolescence are in fact conditioned by the culture and not by the developmental process alone. For example, we have long considered conflict as inherent in the growing-up process, yet Margaret Mead in describing Samoan society depicts adolescents who face hardly any conflict situations, in a culture that offers little opportunity (and makes few demands) for choice.[44] It is none the less true, however, that certain problems are characteristic of adolescence in our culture, and brief attention to the cultural conditions that make adolescence a trying period should help lay a basis for understanding these problems.

The adolescent's problems are viewed as largely stemming from conflict situations involving youth's maturation prior to society's readiness to accept his maturity, from the variety of choice situations that confront and perplex the youngster, and from the rate of change in our culture itself. Zachry and Lighty eye askance a situation where "the body is urgently ready for expression for which society affords . . . no approved means." [45] Partridge says modern society creates its adolescent problems by refusing to consider its youth grown up until many years after they have matured physiologically and mentally.[46] Margaret Mead is concerned with the multiple choice problems facing adolescents. She also notes the correlation between the large number of competitive situations in youth and widespread feelings of inferiority. In Samoa the dance alone affords opportunity for competition—and it is almost the only area in which inferiority feelings are evoked.[47] Plant and Cantor are concerned with the problems that rapid change in our society arouses. The former sees a threat to security implicit in a shifting population and the effect of a congested population on the inviolability of the self.[48] The latter is anxious about uncertain standards which result in personalities as unstable as the values we hold.[49] Blos is concerned with the fact that the adolescent "upon entering the community as the social field in which to enact and establish his maturity . . . meets with a severe rejection." [50]

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[44] Margaret Mead, *Coming of Age in Samoa* (New York, Blue Ribbon Books, 1928), p. 8.

[45] Caroline B. Zachry and Margaret Lighty, *Emotion and Conduct in Adolescence* (New York, D. Appleton-Century, 1940), p. 170.

[46] E. de Alton Partridge, *Social Psychology of Adolescence* (New York, Prentice-Hall, 1938), p. 12.

[47] Mead, *op. cit.*, p. 120.

[48] James S. Plant, *Personality and the Cultural Pattern* (New York, Commonwealth Fund, 1937), pp. 95 ff. and 120 ff.

[49] Nathaniel Cantor, *The Dynamics of Learning* (Buffalo, Foster and Stewart, 1946), pp. 32–34.

[50] Peter Blos, *The Adolescent Personality* (New York, Appleton-Century-Crofts, Inc., 1941), p. 255.

A. EMANCIPATION

Probably the fundamental problem for youth in our society is emancipation—from the home, from the school, from other custodial agencies in relation to which the youngster feels an onerous dependence. In the family, as Blos points out, the problem is not only that of the adolescent who seeks to try his wings, but a problem of parental adjustment as well:

> Social trends of the power age which are slowly affecting family life also have repercussions upon adolescent adjustment. Delayed marriage and the resulting coincidence of middle age in parents with adolescence in their children places the child in an extremely important position for maintaining the family equilibrium. Parents are apt to seek compensations at an age when their own sexual life is in natural decline.[51]

Because of the nature of this conflict, Lois Meek suggests that the function of the school in adolescence is to provide security for the youth as he experiments with roles of independence and strives to solve problems that arise because he wants independence at the same time as he desires protection.[52] Yet Blos is critical of the school as being even

> less flexible than the family in accommodating itself to manifold changes in growth and development of its students. The same educative procedure which it employs for the child of five or six is continued in its handling of the adolescent student.[53]

B. DISCOVERING A ROLE

Second, because of pressures from his own physical development and from the culture, the adolescent strives increasingly to determine a role for himself and to play that role as he grows increasingly self-conscious.[54] This self-consciousness is not so painful a development in all cultures, but in ours, which sets a premium on individual differences, on emulation and competition, it is particularly crucial. In determining his role, the youth has three concerns:

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[51] *Ibid.*, p. 240.

[52] Lois H. Meek, *Personal-Social Development of Boys and Girls* (New York, Progressive Education Association, 1940).

[53] Peter Blos, *The Adolescent Personality* (New York, Appleton-Century-Crofts, Inc., 1941), p. 244.

[54] Zachry and Lighty, *op. cit.* See Chapter V on development of ethical standards, and Chapter IV on playing sex roles.

(1) acceptance by his peers and adults as an adult and an individual, (2) achievement of the appropriate sex role, (3) answering questions—like Who am I? and Where am I?—that serve as a basis for an outlook on life.

Acceptance as an adult and as an individual in his own right causes the adolescent to overestimate the value of achievement and to attempt to gain acceptance through achievement.[55] Acceptance is at the basis of the wide experimentation a youth embarks upon in order to establish a role for himself. Moreover, it is probably fundamental in the adolescent's pervasive concern with vocational adjustment. Until the youth begins to contribute his share to the performance of the world's work, until he can attest to his contribution through the symbol of a cash wage, neither in his own eyes nor in those of his contemporaries and adults is he valued as a full-time partner in adult society. To delay employment, then, is to delay maturity in a very real sense—and that apart from other necessary adjustments that economic independence makes possible.

With an appreciation of youth's identification of adulthood with employment it is not difficult to understand the hopeless preferences that so many adolescents express. Quite reasonably the adolescent has set his sights on those roles which reflect the most kudos in our culture. The school's avoidance of—and disdain for—most of the physical work of the world is reflected in the adolescent's preference for professions and white-collar jobs that the school, his parents, and society have sealed with the stamp of approval.

From very early childhood—beginning with the blue-or-pink layette problem—the sex role of the individual is given major attention by parents, friends, the community. With puberty, intensified concern over the sex role is naturally expected. In our culture the youngster finds his questions greeted with dismay, his sex desires stimulated by commercial entertainment, and marriage not feasible until several years after arrival of sexual maturity. Yet these intervening years are filled with learning, earning, and leisure activities in which the sex role is often a dominating feature.

Last in the role-formation problems are questions as to function and meaning in the universe. Establishing a role involves self-consciousness, and consciousness of self depends upon consciousness of others and relations with them. The desirable balance must be achieved between demands upon others and the contributions the adolescent is willing to make to others. Ethical standards develop, according to Zachry, from acceptance of self; according to Plant, from feelings of adequacy and security.[56] But adequacy and security, too, depend upon satisfaction with the role one perceives for himself and acceptance of that role by others. Thus the individual's consciousness of self—of the role he plays—determines the nature of his relations with others and the ethical standards he develops.

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[55] *Ibid.*, pp. 167 ff.

C. PEER-ADJUSTMENT

A third problem accentuated in adolescence is adjustment to the group—in our society particularly to the adolescent's own age group since adolescents move largely in a society of their own. This problem stems both from weaning from the family, which has been growing more complete, and from increased awareness of sex roles as a result of pubertal changes. The peer group becomes particularly strong in this period, perhaps as a symbol of emancipation from the family, perhaps in an effort to express a sex role, perhaps as the expression of a heightened sense of selfhood which makes affiliation and identification with a group of one's own choosing important as a positive assertion of individuality. Having asserted his individuality in joining a group and conforming to its standards despite criticism from outside the group, the individual finds security in that conformity and in the approval of his fellows. Thus acceptance by the peer group is of vital importance to the youngster. Problems of winning approval of his own sex and of the other take precedence over many activities imposed by school and family. As a result, the group acquires the power to assign roles to its members and require that they play them,[57] and to set the level of aspiration for its members.[58]

D. CHOICE-MAKING

Fourth is the problem of facing choices and making decisions. This problem has peculiar impact upon adolescents since they are now assuming initial responsibility for such decisions, and because in our culture these choices are many. Blos recounts some of them:

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[56] *Ibid.*, Chapter V, and Plant, *op. cit.*, Chapter V.

[57] Partridge, *op. cit.*, p. 148.

[58] Kurt Lewin, *A Dynamic Theory of Personality*, translated by Adams and Zener (New York, McGraw-Hill, 1935), p. 100.

> What is to be his vocation, and how can he best prepare for it? How shall he find his mate? Will he marry early or late, and what prospect has he of being able to afford marriage at all? How is he to manage his sexual needs in the meantime? What is a workable code in sex behavior, in business ethics, in marital pattern? What even is the accepted role for a man or a woman in our society today? Can he accept the religious and political affiliations of his parents?[59]

In these choice situations, Blos repeatedly points out that the youngster can find the solution only through experimentation. But while he experiments he comes upon additional problems of security—support and approval as he muddles through. The wide range of possibilities in making a choice and the pressure to come to a decision increase the chances for mental conflict.[60] Thus, a compound of inner needs and environmental pressures makes choice-problems and security while working toward decisions one of the important concerns of youth.

E. MAKING TRANSITIONS

A fifth problem is actually making transitions from the harbored life in school or family to adult society. For the adolescent perhaps the most important is involved in developing those attitudes toward work which will facilitate his entry into an occupation and employment as a primary badge of adulthood. Hence the importance of vocational orientation, exploration, and preparation; hence the need for placement as a "send-off" when the adolescent leaves school. Other transitions revolve about social and emotional maturity which depend upon successful solution of the problems mentioned above.

F. STUDIES ON THE NEEDS OF YOUTH

Before leaving the subject of the problems of adolescents it should be instructive to note the findings of the various youth studies and investigations into the needs of youth made during the Thirties, when adulthood became acutely conscious of a "youth problem." It is interesting to note, too, that the newly constituted Life Adjustment Education Commission, considering the studies of the depression years unduly affected by abnormal conditions, is embarking upon a new study of youth needs as a basis for its program.

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[59] Peter Blos, *The Adolescent Personality* (New York, Appleton-Century-Crofts, Inc., 1941), p. 242.

[60] Partridge, *op. cit.*, p. 8.

In *The Needs of Youth*,[61] Doane indicates that many of the lists of youth needs are formulated by educators on a basis of the demands of society rather than the problems which adolescents face. The two, obviously, are not mutually exclusive, but it is useful to recognize differences that may arise as adults and adolescents look from different points of view at the same situation. Corey, Havighurst, Redl, and Prescott[62] have developed the concept of "developmental tasks" of various age levels. These developmental tasks are characterized as being necessary learnings, as capable of achievement only during a restricted time interval, and as common to all individuals in an age level. The adolescent's developmental tasks are defined as: coming to terms with his body, learning new relationships with age-mates, achieving independence from parents, acquiring adult social and economic status, developing self-confidence and a system of values. Bigelow reduces these needs to problems of sex and vocational choice and placement.[63] Douglass, writing for the American Youth Commission, listed these: a place with fellow youth, experiences of personal achievement, vocational success, a happy home, understanding and improving political conditions, and health.[64]

A number of efforts have been made to have youth themselves reveal their own problems and needs. Invariably employment and security rank highest. The Regents' Inquiry in New York, the Maryland Survey of the Youth Commission, the WPA study in New York City, and the 4H Club study made in rural areas all agreed that up to 80 per cent of problems named by youth involve vocational adjustment. Objecting to the free-response technique commonly employed—since youngsters might be expected to refrain from naming more personal problems—Doane submitted a check list of 159 items to more than 2000 students from diverse backgrounds. The five most important problems revealed in his study "appear to be in the realms of vocational choice and placement, relationships with friends of the same and opposite sex, sex, and personal health." But of all 159 topics, how to find a job, choosing a career, how to apply for a job, keeping a job, and finding out what kind of work you are suited for ranked 1, 2, 4, 5, and 6. How to make friends (third place) was the only other item to be included in the six most frequently checked.[65]

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[61] Donald C. Doane, *The Needs of Youth* (New York, Teachers College, Columbia University, 1942).

[62] S. M. Corey, "The Developmental Tasks of Youth," in *The American High School*, H. L. Caswell, ed. (New York, Harper, 1946).

[63] Maurice A. Bigelow, *Adolescence* (New York, Funk and Wagnalls, 1937).

[64] Harl R. Douglass, *Secondary Education for Youth in Modern America* (Washington, D. C., American Council on Education, 1937).

Interesting implications were discovered in these findings. Note the vocational stress as the American Youth Commission defines the issues in secondary education: equality of educational opportunity, employment for youth, economic security, guidance, vocational training, reorganization of secondary education, leisure-time provisions, health education, citizenship, and community planning.[66] As the Commission's interviewers spoke with 13,528 young folk in rural and urban Maryland, they noted time and again that youth could not mature without occupational experiences; that school was no substitute for work; that independence from parental control depended both upon the income from the job and the steadying influence of the job in terms of self-control, self-reliance, and self-support.[67] The need for ethical development, too, was to be met in occupational life:

> Character can be formed only by toughening years of day-by-day experience of life, and contact with human beings—not social contact, but in shared work and effort. The effort to invent "character-forming" courses of study in the vacuum of the classroom is piteously inept.[68]

As the school has the problem of helping youngsters meet the demands of society by preparing them to enter into its functions successfully, so also it has the problem of meeting the personal needs of the adolescent: emancipation, assumption of an appropriate role in life, the making of decisions in a choice-laden culture, and the actual transition into adult life. In doing so, the school would be wise to follow the major interests expressed by youth—vocational adjustment and social adaptation.

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[65] Doane, *op. cit.*, Chapter V.

[66] Rainey, "Foreword," in Bell, *Youth Tell Their Story*.

[67] *Youth and the Future*, pp. 15–17.

[68] Dorothy C. Fisher, *Our Young Folks* (New York, Harcourt, Brace, 1943), p. 25.

Just as the conventional program has tried only tangentially to meet problems centering about the social pole, it has either avoided or hesitated to make a frontal attack on the personal problems facing youth. Yet in some places a functional approach—attention focused on social processes and youth problems rather than on subject matter—is being employed. Such programs will be presented in the following chapter. However, it is felt that the most direct method of combining these two areas while taking advantage of findings in psychology and personality development lies in an occupational orientation. That approach will be the subject of Chapter V.

CHAPTER IV

Toward a Functional Program

For many years now American educators have been aware that subject classes alone cannot fulfill the various functions commonly ascribed to the secondary school. This awareness has revealed itself in the addition of various agencies and activities to the school program in an attempt to solve some of the basic problems of education. Recognition of the need for social integration has led to the organization of home rooms; the need for guidance has given rise to the creation of separate guidance departments; separate vocational schools and departments have been set up to care for the needs ostensibly of those who wanted preparation for work, actually in most cases of those whose academic ability was low; "work experience" has been added to curricula admittedly short in contact with the out-of-school work-world; extracurricular activities have been organized with a view to providing recreation and social adjustment; homogeneous grouping has been attempted to solve the problems raised by the presence of the "slow learner" in a school not designed for him. Thus we find activities, legitimately the center of the educative process, set up on the periphery of a curriculum which has kept the academic disciplines as its chief focus. In such programs it is not uncommon to find actual life functions being used to vitalize academic content rather than the use of subject matter to enrich life functions.

The influence of the activity movement in the elementary schools began to "percolate" through to the secondary level soon after the first world war. First, efforts were made to "psychologize" the conventional subject matter, to capitalize on the interests of students in the approach to the old content. Second, the efforts broadened to attempts to correlate one subject with another, then to fuse two or more subjects, then to "integrate" subjects around a broad theme. Finally, it was seen that there was nothing inherently sacred in the subjects themselves, that what was needed was a fundamentally new approach. That approach would have to be made from the viewpoint of the learner and society, not from within a framework imposed by university-molded departmentalization.

1. The Social-Learnings Approach

The idea of behavior as interaction of organism and environment was translated in education into interaction of the learner's motives and society's demands, at times with heavy emphasis on the import of the social milieu. Recognition of man's destiny to live in society prompted the plea (1) that all aspects of the school program be utilized to develop social understanding and sensitivity through group living in the school; (2) that problems and processes within the experience of the child be the basis of curricular organization; (3) that the learner have ample opportunity to engage in socially valuable undertakings; and (4) that the school select and organize experiences which give understanding of social realities.[1] A curriculum was sought which would "come to grips with reality" and introduce the pupil to "the stresses and tensions of contemporary life."[2] Dodds, concerned with the "slow learner," declared that the individual must see the relation between his own needs and the needs of society.[3]

With the aim of arousing social consciousness, there have been introduced, in high schools in the past quarter-century, many social studies courses, "social functions" curricula, and "cores," the latter often thinly disguised social studies courses that have swallowed up "English" and a smattering of science and art. However, with the reservation that social studies taught as a thing apart in academic cloisters may be as meaningless as dead languages, these programs are viewed as desirable efforts to bring the work of the school nearer to the subject matter of life.

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[1] Hollis L. Caswell, *Education in the Elementary School* (New York, American Book Co., 1942), pp. 140–43.

[2] Harold C. Hand and Will French, "Analysis of the Present Status of Curriculum Thinking," in *The Changing Curriculum*, Henry Harap, ed. (New York, D. Appleton-Century, 1937), p. 6.

[3] B. L. Dodds, "That All May Learn," National Association of Secondary-School Principals *Bulletin*, Number 85 (November 1939), p. 60.

Still, social studies could not substitute for participation in the community's life. At the turn of the present century Dewey was pointing out that no ethical training could take place if the conditions of the social spirit were lacking in the learning medium—if the school were isolated from the ordinary conditions and motives of life.[4] More recently, the Evanston New School leaders have expressed belief in two ways of providing that social spirit—developing cooperation through work, and building a realization of the individual's debt to society through social service.[5] The Institute of School Experimentation asserts:

> The school which never gives children and youth experience in dealing with real situations sends out into the life of the community young people who are indifferent to or even unaware of some of the fundamental problems of society.[6]

Moreover, there was a realization that the social studies were not merely to represent a body of fact, but to reflect a value—democracy. Investigations had shown that mere presentation was not enough, that explicit attention would have to be given to the development of attitudes (see pages 40–41, for summary of findings). Democracy was seen not as subject matter, but as a way of life; and the school would have to drop its own authoritative methods of teaching, in the sense of "handing down," if students were to be trained in non-authoritarian, non-handed-down procedures. We learn what we live; hence democratic methods of cooperative action become an integral part of every experience. Teacher-student planning takes the place of curricula and courses of study dictated by a central office; teacher-pupil participation in policy-making that concerns them becomes an obvious corollary.

The school is seen as having a positive role in our democracy. Caswell and Campbell regard the school's responsibility as one of defining ideals and equalizing educational opportunity.[7] French and Hand report a growing conviction among school personnel that the social purpose of the school is education for reconstruction of American life with an emphasis on "life as it is becoming." [8] The Sloan Experiment in Applied Economics starts from the premise that the purpose of the school is to benefit the immediate community directly and in the here-and-now.[9]

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[4] John Dewey, *School and Society* (Chicago, University of Chicago Press, 1900), pp. 28–30.

[5] C. M. MacConnell, E. O. Melby, and C. O. Arndt, *New Schools for a New Culture* (New York, Harper, 1943), pp. 171–74.

[6] F. B. Stratemeyer and others, *Developing a Curriculum for Modern Living* (New York, Teachers College, Columbia University, 1947), p. 408.

The outcome of these concepts, as it relates both to individual development and to the social role of the school, has been the introduction of a more functional curriculum, that is, a school program which "functions" more directly in the lives of learners, meeting their immediate needs and preparing them for predictable needs of the future. MacConnell, Melby, and Arndt declare:

> In the school of tomorrow the aristocratic, cultural tradition of education must be completely and finally abandoned. Scholarship must become functional. This does not mean that it will be concerned only with the material wants of man or that it will lack creativeness or intelligent stimulation, but it *will* cease to rattle the bones of the dead past solely for pleasure, or worse, out of a sense of academic duty.[10]

2. The Approach Through Integration

With agreement that a desirable aspect of personality development would be "integration," efforts have been made at least beginning with Herbart if not before to unify school experiences. These efforts operated first under the assumption that a unified school program would lead to integrated personalities, but they neglected to consider that integration is an aspect of personality rather than of program. Nor did they take cognizance of the principle that it is the learner, not the school, who does the integrating as he chooses to assimilate those things which meet his needs and purposes. From these early efforts arose the "culture epochs" of Herbart and Hall, which had rapid spread and which have even penetrated college programs of late. Various "integrated" curricula were built around social studies, science, or some "broad theme." Courses were "correlated" or "fused."

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[7] Hollis L. Caswell and Doak S. Campbell, *Curriculum Development* (New York, American Book Co., 1935), pp. 27–35.

[8] Hand and French, *op. cit.*, p. 6.

[9] See Clara M. Olson and Norman D. Fletcher, *Learn and Live* (New York, Alfred P. Sloan Foundation, 1946).

[10] MacConnell *et al.*, *op. cit.*, p. 166.

Later insistence that integrating had to be done by the learner, and recognition of the importance of the culture led to new efforts to meet the need for an integrating, rather than an integrated, curriculum. W. W. Charters carried over the job-analysis approach into life activities, and Stephens College in Missouri made its celebrated analysis of post-college activities of its graduates. On this basis of demonstrated adult demands, a program for the college was put into effect. This effort continues today in places like the Rochester Institute of Technology, where Charters is still active, in the Minneapolis Dunwoody Institute, where Prosser has been trying for many years to move toward a "life adjustment" curriculum, and in the announced approach of the Commission on Life Adjustment Education. The Commission has been attempting to focus attention of school systems on the need to reorient high school programs in terms of the life needs of youth.

One of the most recent methods of attack has been through an analysis of the "persistent life situations" that individuals face as children, as adolescents, and as adults. This represents an effort to synthesize the social demands implicit in the social-functions attack and the developmental tasks facing any group of learners. Experiences are given curricular attention because (1) they are problems currently affecting the equilibrium of learners, and (2) they are related to situations that persist throughout the life of the learner. *Developing a Curriculum for Modern Living* carries a comprehensive section (pages 122–299) outlining the life situations that learners face, divided according to four age levels and classified within each level under these headings:

1. Health
2. Intellectual power
3. Responsibility for moral choices
4. Aesthetic expression and appreciation
5. Person-to-person relationships
6. Group membership
7. Intergroup relationships
8. Natural phenomena
9. Technological resources
10. Economic-social-political structures and forces

3. The Community School

A third type of functional approach has been one which relates the school to the community and focuses the school's program on the community's needs and resources for learning. Goodwin Watson indicates five levels of insight into relationship of school and community in the John Dewey Society's First Yearbook, *The Teacher and Society*. He distinguishes among the "commonplace" relationship, which is one of distinct separateness; that of "school support" in which the community takes active measures to improve the school; that of "community service," in which the school attempts to provide special services for the community; that of "social process," in which interaction between school and community is constant; and that of "social integration," in which school and community merge.[11]

Participation of youth in useful activities in the community is recognized as necessary for maturation and desirable for the development of social consciousness. Olsen contrasts the school which provides for such participation (the "life-centered" school) with the "book-centered" schools of tradition and the "child-centered" progressive school of the Twenties.[12] The life-centered school adds work experience and service projects to bridges already employed by the progressive schools between school and community: camping, surveys, field trips, extended field study, and interviews. It retains the conventional use of documentary materials, resource visitors, and audio-visual aids.

Perhaps the most interesting activity of the community school is its effort to improve living in the local area. The Sloan Project in Applied Economics and the Michigan Community Service Program, to be described in Chapter VII, illustrate the effort to project the school directly into the sphere of community betterment and to draw the community into the school. In *Learn and Live,* Olson and Fletcher present a sample core based on the three life necessities: food, shelter, and clothing.[13] The value of community participation as a core for education would seem to be great in fields of integrating the individual into community life and of helping the individual to integrate his own concepts of the role he plays and the function of the social environment.

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[11] Goodwin Watson, "Teacher and Community," in *The Teacher and Society,* W. H. Kilpatrick, ed. (New York, D. Appleton-Century, 1937).

[12] E. G. Olsen *et al., School and Community* (New York, Prentice-Hall, 1945).

[13] Olson and Fletcher, *op. cit.,* pp. 74–87.

The most direct and usual connection between the individual and society, however, lies not in altruistic service to the community—however desirable—but in the work that the individual does which at the same time sustains himself and his culture. The relationship between the individual, his work, and the community is a vital one. The thesis of this volume is that a primary emphasis on occupations in this three-way relationship presents a more valuable educational approach. The following chapter will discuss the occupational program.

4. The Core as Method

The social-learnings, integration, and community approaches are of interest both because of a content which moves closer to the lives of the learners and because of the key concept employed in the methodology: the use of a "core" or unifying center in the school program to help the learner tie his educational experiences together. Various characteristics of the core have emerged as it has been applied in the past decade.

First, the core is conceived as a program of general rather than specialized learning. Caswell says it is "derived from the needs which are common to all youth and which can best be achieved in undifferentiated groups." [14] As such, the program will aid the student to "meet the common demands of civic participation" through a body of experiences which

> (1) arouse concern on the part of youth for constructive participation in civic matters, (2) afford a background of knowledge and understanding of our culture which will provide perspective for immediate problems, (3) develop techniques of working in group enterprises involving individuals of conflicting views and varying abilities, (4) cultivate interest in current civic, social, and economic problems and furnish the means of keeping informed on them, and (5) stimulate a loyalty to our democratic ideals based on knowledge.[15]

Second, the core makes possible the use of knowledge of human growth and development and of the psychology of learning as the number of teacher contacts for the pupil, and the number of pupil contacts for the teacher, are sharply reduced. The disintegrative effect of the highly departmentalized school is diminished; the program is student-oriented, not subject-centered. Learning is approached from the viewpoint of directing the learner's integration of knowledge, skills, and attitudes that are or will be needful to him. The California program points to opportunities "to engage in worth-while, satisfying experiences" while the pupil works out his own "most worthy and most challenging purposes." [16] The experiences selected to effect this integration necessarily cut across subject-matter barriers. At Wells High School in Chicago, the conventional departmental organization is retained, but it is felt that the social significance of the centers (cores) chosen draws the attention of the teachers away from the subjects as such.[17] At Evanston, the New School cuts across departmental lines with "social relationships, which is the subject matter; English, which is an important medium of approach; science, which is the method used; the democratic way of life, which is the general purpose." [18]

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[14] Hollis L. Caswell, ed., *The American High School* (New York, Harper and Brothers, 1946), p. 150.

[15] *Ibid.*, p. 145.

Third, guidance becomes part of the curriculum as the core teacher assumes major responsibility in this area for his students. Specialized guidance workers lend their services chiefly to advising the core counselor and to handling serious maladjustments. The core serves as a home base where small-group guidance is carried on and the teacher acts as a personal counselor for democratic living.

Fourth, administrative organization and teaching-learning procedures make possible greater and more deliberate use of community resources as part of the curriculum.

Fifth, the place of subject matter and skill development has received a new interpretation. Subject matter is viewed as an end-point in terms of organized experience, not as the process of learning in itself; it is a resource to be used in solving problems, not a body of knowledge to be committed to memory. Subject matter is used to help the learner appreciate the worth of factual data available, to fill in gaps in information necessary to meet life's persisting situations, to aid in developing concepts, and to provide an organized body of knowledge for the specialist. However, the use of subject matter is limited by the criterion of the learner's ability to recognize the contribution which the subject can make.[19]

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[16] California State Board of Education, *Teachers' Guide to Child Development, Manual for Kindergarten and Primary Teachers* (Sacramento, The Board, 1930), p. 18.

[17] Paul R. Pierce, *Developing a High School Curriculum* (New York, American Book Co., 1942), p. 38.

[18] MacConnell *et al.*, *op. cit.*, p. 22.

With the de-emphasis of subject matter, the "unit" becomes the focus of learning activity. Harap defines the unit as a complete and coherent learning experience having purposes meaningful to the pupil, accepted by him as his own, and closely related to real life situations. The basis is in experience, not in "subjects."[20] In functional situations, the unit is characterized by (1) being derived from real life activities, (2) providing opportunity for real purposing and real projects that carry over into the child's normal activities, (3) including many kinds of activities to provide for individual differences, (4) making growth of the individual both possible and continuous, (5) leading to other learning situations, (6) providing for progress in tool subjects, (7) meeting demands of society and helping to clarify meanings, (8) developing desirable habits.[21]

As subject matter is developed through purposeful experiences, so too are skills. Caswell and Campbell point out that employment of particular generalized controls depends upon ability to use them effectively; hence arises the need for facility in use which comes through practice. For practice to be effective, the child must have a dominating purpose which makes the practice meaningful. With the purpose understood, the pupil engages in a series of activities under guidance and later himself evaluates the outcomes. Length of practice is determined by realization of purpose and by the maturity of the learner.

Sixth, various mechanical changes have been introduced into the school schedule. Generally, longer blocks of time than the customary 40-to-60-minute class period are given to the core; in some cases high school cores extend fully half the day. Second, scheduling is kept flexible to facilitate out-of-school experiences as a normal part of the curriculum without involving acts of the principal or Providence. Third, grouping is informal, permits of change, drops the cliché of homogeneous grouping as educators realize that separating the sheep from the goats does not build community of interest.

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[19] Stratemeyer *et al.*, *op. cit.*, pp. 360–62.

[20] Henry Harap, ed., *The Changing Curriculum* (New York, D. Appleton-Century, 1937), p. 77.

[21] Lincoln Elementary School Staff, *Curriculum Making in an Elementary School* (Boston, Ginn, 1927), pp. 31–41.

Seventh, a growing recognition is dawning of the function of pupil and teacher in joint planning of the core's activities. Education for choice is seen to involve preparatory experiences in choice-making. Efforts to meet pupil needs and purposes are vain if the pupils have no opportunity to express those needs and purposes. The teacher ceases to be the autocrat, becomes the guide. Harap points out that curriculum-planning in advance can determine only the framework—the areas of living and levels of growth desired. Daily activities, however, accrue from teacher-pupil planning as part of the on-going process of meeting immediately felt needs.[22]

Eighth, the core is not seen as "swallowing up" the entire school program, but as being one of six major functions: the core, special services in the form of remedial work and coaching for special purposes, physical conditioning and recreation, special interests, student government, and occupational preparation.[23]

Last is the nature of evaluation in the core program and evaluation of core experiences. Evaluation is regarded as a continuous process as pupils take stock of present experiences designed to meet their needs. Evaluation follows the pattern of experimentalist thought: it tests meanings and activities through their consequences. Thus, behavioral changes form the basis for evaluation. Like planning and purposing, evaluation loses meaning unless it is undertaken by pupils under the guidance of the teacher.

The core has emerged as a fruitful method of attack whether the approach to a functional curriculum be oriented toward social processes, the life activities of the individual, or the needs and resources of the community. The following chapter will attempt to show how an occupational core promises to be the single stream into which all three tributaries may flow.

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[22] Harap, *op. cit.*, p. 111.

[23] Hollis L. Caswell, *The American High School* (New York, Harper and Brothers, 1946), pp. 142–43.

CHAPTER V

Occupational Education

THE previous chapter has presented the trend toward functionalism in the employment of cores centered about life-adjustment problems, persistent life situations, social processes and community improvement. They come closer to actual life problems, they are nearer the goals and purposes of youth, they provide for greater integration of knowledge and personality than do conventional programs. Often, unfortunately, they prove under analysis and in practice to be little more than social studies courses that include English within their framework. As such they are but slightly broader and more effective than other social studies courses. In almost every Eight-Year-Study school where cores had been instituted the humanities and social problems dominated the program.[1] Except for community projects, very little attention is given to modern occupational life, and work is seen merely as something of specialized value to fit the student for that job by which he will earn his daily bread.

1. The Separation of Industry and Education

This separation of occupation from education is as old as the word "school" itself, derived as it is from the Greek word for "leisure." Dewey points out again and again that the division is the result of Greek class stratification which assigned labor to one group and leisure to another. For the latter class "liberal" education was conceived: "Its aim is not preparation for living but for noble living, enjoying, without engaging in industrial production, science, art, and the direction of public affairs." The result:

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[1] See *Thirty Schools Tell Their Story*, Adventures in Education, Vol. V (New York, Harper, 1943).

> We are engaged in training a comparatively small number for an academic life of leisure and culture; we are engaged in failing to train the great number so that anything but a life of somewhat passive and dulled participation in unidealized labor shall be possible to them; we are permitting a few to train themselves so as to control the labor of these masses to their own ends.[2]

However, there are fundamental differences between the Greek world and ours. An interdependent life has taken the place of a dependent life; ancient industry rested on routine and custom while ours rests on science and technology that can well stir the imagination and intelligence; labor is no longer excluded from the management of public affairs.

As a result, one of the crusades Dewey has taken part in has been the effort to break the dichotomies that have sprung up between labor and leisure, between work and education, between art and industry. On the labor-leisure dualism he says:

> The problem of education in a democratic society is to do away with the dualism and to construct a course of studies which makes thought a guide of free practice for all and which makes leisure a reward of accepting responsibility for service, rather than a state of exemption from it.[3]

On the culture-industry dualism:

> The opposite of a career is neither leisure nor culture, but aimlessness, capriciousness, the absence of cumulative achievement in experience, on the personal side, and idle display, parasitic dependence upon the others, on the social side.[4]

On the art-industry dualism:

> The Greek instinct in classifying together artist and artisan, was, I think, correct and prophetic; not that the artist is to be pushed down to the plane assigned by the Greeks to the draftsman, but that the laborer is to be brought up to the level assigned by us to the creative artist. . . .

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[2] John Dewey, "Culture and Industry in Education," address delivered in 1906, reprinted in *Teachers College Bulletin*, March 1919, pp. 13–14.

[3] John Dewey: *Democracy and Education* (p. 305) Copyright 1916 by The Macmillan Company and used with their permission.

[4] *Ibid.*, p. 359.

> Art is always the mean term, the connecting link, of play and work, of leisure and industry. . . . Play as work, as freely productive activity, industry as leisure, that is, as occupation which fills the imagination and the emotion as well as the hands, is the essence of art.[5]

In a democracy we should be prepared to accept Lincoln's dictum that if God had meant some of us to do all the work and others to enjoy it only, He would have made the first group all hands and the second all mouths. In proportion as our education has continued the dichotomy between industry and education, it has failed to be effective. Norberg points to

> . . . the common misconception that secondary education can, and should, bring young men and women to social and political maturity largely prior to their systematic study of, and actual participation in, the occupational activities of the community life. . . . To assume that any full measure of political and social understanding or competence is likely to be obtained apart from the contemporaneous induction of the individual into occupational life of the society seems totally unwarranted.[6]

Social and intellectual maturity, he says, are not the automatic results of biological development in a pleasant and literate environment, however surcharged with discussion of current social problems and "purposive" activity, unless these activities involve participation in the world's work. If the broadest educative effects of a common school environment are to be carried into American life, it will have to be through a system of youth education which actually comes into living contact with the occupational functions that pattern the thinking and feeling of the maturing person.

Thus, the dichotomy has resulted in lack of effectiveness in bringing youth to full social and intellectual maturity, even apart from economic considerations. But what of the vocational schools? Have they not been more successful, since they are concerned with preparation for work? Justman finds a negative answer here, too:

> In the past the school has been mistaken in the manner in which it conceived "vocational training." The appeal has been to the motives

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[5] Dewey, "Culture and Industry in Education," pp. 16–17.

[6] Kenneth D. Norberg, *American Democracy and Secondary Education* (New York, Teachers College, Columbia University, 1944), p. 118.

> of personal interest and profit that prevail in the industrial world; emphasis has been on the inculcation of fixed habits and skills that copied the current processes of industry. When vocational training was opposed to academic training, it was not unnatural that vocational activities should tend to be lacking in intellectual substance and depth. Interest in these activities was probably, as much as anything else, an escape from the meaninglessness of academic routine.[7]

Bobbitt phrases the problem somewhat differently. He questions the wisdom of arguing whether the tree should bear the fruit or the flower; it is impossible, he says, to separate them. No more, he declares, can schools divorce cultural and industrial education and expect either to be fully meaningful.[8]

2. Are Occupations Educative?

If education in a democracy necessitates reconciliation between culture and industry, leisure and labor, art and work, to what extent can education be found in the occupations of men, and how far can the general development of personality and social attitudes (including citizenship) be secured through education in occupations? It has been shown that work activities have been fundamental in building our culture; if it can be shown that work is educative, if the relation of occupational experiences and the school can be made manifest, the answer to these questions should be clear.

Logically, it would seem that what has contributed to the education of the race should contribute to the education of the individual. Thus we discover that those authors who find work basic in extending the culture of mankind find education inherent in work activities. "Occupation is a concrete term for continuity," says Dewey.

> It includes the development of artistic capacity of any kind, of special scientific ability, of effective citizenship, as well as professional and business occupations, to say nothing of mechanical labor or engagement in gainful pursuits.[9]

Occupations develop man's mind and organize his life:

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[7] Joseph Justman, *Theories of Secondary Education in the United States* (New York, Teachers College, Columbia University, 1940), pp. 285–86.

[8] Franklin Bobbitt, *The Curriculum* (Boston, Houghton Mifflin, 1918), p. 6.

[9] John Dewey: *Democracy and Education* (p. 359). Copyright 1916 by The Macmillan Company and used with their permission.

> If we search in any social group for the special functions to which mind is . . . relative, occupations at once suggest themselves. . . . Occupations determine the fundamental modes of activity, and hence control the formation and use of habits. These habits, in turn, are something more than practical and overt. . . . The occupations determine the chief modes of satisfaction, the standards of success and failure. Hence they furnish the working classification and definitions of value; they control the desire processes. Moreover, they decide the sets of objects and relations that are important, and thereby provide the content or material of attention, and the qualities that are interestingly significant. The directions given to mental life thereby extend to emotional and intellectual characteristics. *So fundamental and pervasive is the group of occupational activities that it affords the scheme or pattern of the structural organization of mental traits. Occupations integrate special elements into a functioning whole.*[10] (Italics mine.)

But not only has work been at the center of man's integration: it may also be seen to be educative in and of itself. Returning to experimentalist first principles, we find Dewey's assertion, " 'Work,' in the sense of *intelligent action*, is therefore highly educative, because it continually builds up meanings while at the same time it tests them by application to actual conditions." [11] "The active occupations in which appliances are brought to bear upon physical things with the intention of effecting useful changes is the most vital introduction to the experimental method." [12] In the intellectual possibilities resident in various arts, crafts, and occupations "are found the means by which the blind and routine experience of the race may be transformed into illuminated and emancipated experiment." [13] "Occupations involve the use of natural materials, tools, modes of energy, and do it in a way that compels thinking as to how they are related to one another and to the realization of ends." [14]

Not only are educational possibilities inherent in work, but there is no education without work:

> The radical reason that the present school cannot organize itself as a natural social unit is because just this element of common and pro-

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[10] From *Philosophy and Civilization* (pp. 175-76), by John Dewey. Copyright, 1931, by John Dewey. Courtesy of G. P. Putnam's Sons.

[11] *Ibid.*, p. 212.

[12] John Dewey: *Democracy and Education* (p. 237). Copyright 1916 by The Macmillan Company and used with their permission.

[13] Dewey, *Philosophy and Civilization*, p. 217. [14] *Ibid.*, p. 225.

> ductive activity is absent. . . . Upon the ethical side, the tragic weakness of the present school is that it endeavors to prepare future members of the social order in a medium in which the conditions of the social spirit are eminently wanting.[15]

Dewey's fullest brief for occupational education is found in *Democracy and Education*, where he points out that (1) an occupation is the only thing which "balances the distinctive capacity of an individual with his social service"; (2) an occupation is a continuous activity having a purpose; (3) the only adequate training *for* occupations is *through* occupations.[16] Consequently, education through occupations combines within itself more of the factors conducive to learning than any other method. It calls instincts and habits into play; it is a foe to passive receptivity; it has an end in view; results are accomplished and thought stimulated. Further:

> An education which acknowledges the full intellectual and social meaning of a vocation would include instruction in the historic backgrounds of present conditions; training in science to give intelligence and initiative in dealing with materials and agencies of production; and study of economics, civics, and politics, to bring the future worker into touch with the problems of the day and the various methods proposed for its improvement. Above all, it would train power of readaptation to changing conditions so that future workers would not become blindly subject to a fate imposed upon them.[17]

Sidney Hook endorses Dewey's insistence that separation of vocation and education is "pedagogically defective." "Why a man works," he says, "the effects of his work, its relation to the tasks of the community are questions quite germane to his vocational activity. They are best studied in specific contexts." He therefore looks for an education which will relate liberal and vocational education

> . . . in such a way that no matter how a man earns his living he will not lose sight of the communal traditions to which he owes his knowledge and skills, the communal responsibilities he shares with his fellows, and the communal tasks to which he can make his distinctive contribution.[18]

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[15] John Dewey, *School and Society* (Chicago, University of Chicago Press, 1900), p. 28.

[16] John Dewey: *Democracy and Education* (pp. 360, 361, 362). Copyright 1916 by The Macmillan Company and used with their permission.

[17] *Ibid.*, p. 372.

[18] Sidney Hook, *Education for Modern Man* (New York, Dial Press, 1946), pp. 163, 168.

All of this is not argued in ignorance of the existence of many repetitive tasks in modern industry which are not inherently challenging to the worker. Nor is it argued in neglect of usual attitudes of irksomeness expressed toward one's work. Veblen points out that man's aversion to work is expressed not in relation to the activity involved, but to the servile attitudes that have been connected with work since the days of the class distinctions between "worker" and "gentleman."

As to the nature of modern industry, Dewey has voiced the opinion that we will never cure industrial ills by turning our back on industry.

> If there is to be any result save blind conformity, passive reproduction, it must proceed from facing the overlordship of industry in modern life, with all that it imports. The question as respects education is how the school is to secure the good and avoid the ill of this sovereignty.[20]

Clark takes up the point to indicate that the greatest challenge facing the present generation is finding how to make work more educative.[21] We distinguish good work from bad by the opportunity good work affords to work amid pleasant human associations and to grow. Our generation, says Clark, has the opportunity to provide good work for everyone. Good work is an integral part of education. This point will be reopened in the discussion of the school's responsibilities in occupational education.

3. The Role of the School in Occupational Education

It is partly because of the fact that work in the contemporary culture does not fully exploit its educative potential that the school acquires increased significance. Partly, too, because of the complexity of industrial life, the school must supplement occupational activities if a broad over-view is to be obtained and suitable selection of a vocation made. Then, too, man lives not by meat and drink alone: the school has the responsibility to relate productive activities with their aesthetic, social, scientific, ethical, and recrea-

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[19] Thorstein Veblen, "The Instinct of Workmanship and the Irksomeness of Labor," *American Journal of Sociology* (September 1898), IV, 187–201.

[20] Dewey, "Culture and Industry in Education," pp. 10–11.

[21] Harold F. Clark, *Work as Education* (Columbus, Ohio, Epsilon Pi Tau, 1947).

tional aspects. Forkner asks, therefore, that preparation for work life be included in *general* education:

> Educational objectives for home and family life, for healthful living, for leisure activities, for community participation, for political understanding and participation—all these can and should be closely related to the kind of occupational life to which the person aspires.[22]

The Mississippi state curriculum program is based on the premises that the school is the conscious agency for social improvement, and that the role of the school is to provide insight as to the direction of social change.[23] In making work more educative, the school would seem to be exercising its educational and social-improvement roles at the same time. But particularly as the profit motive forces concepts of cooperativeness and human growth and expression into the background, the school must emphasize these considerations.

> In the school the typical occupations followed are freed from all economic stress. The aim is not the economic value of the products, but the development of social power and insight. It is this liberation from narrow utilities, this openness to the possibilities of the human spirit that makes these practical activities in the school allies of art and centers of science and history.[24]

So says Dewey. And again:

> In schools, occupations are not carried on for pecuniary gain but for their own content. Freed from extraneous associations and from pressure of wage-earning, they supply modes of experience which are intrinsically valuable; they are truly liberalizing in quality. . . .
>
> . . . In the history of the race, sciences grew gradually out from useful social occupations. . . . These are *social* ends, moreover, and if they are too closely associated with notions of private profit, it is not because of anything in them, but because they have been deflected to private uses:—a fact which puts upon the school the responsibility of restoring their connection, in the mind of the coming generation, with public scientific and social interests.[25]

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[22] Hamden L. Forkner, "Provisions for Vocational Education," in *The American High School*, H. L. Caswell, ed. (New York, Harper, 1946), p. 163.

[23] Mississippi State Department of Education, *A Guide for Curriculum Reorganization in the Secondary Schools*, Bulletin No. 5 (Jackson, The Department, 1937), p. 18.

[24] John Dewey, *School and Society* (Chicago, University of Chicago Press, 1900), p. 32.

[25] John Dewey: *Democracy and Education* (pp. 235–36). Copyright 1916 by The Macmillan Company and used with their permission.

That the work of the schools cannot be independent of the social order has been the constant thesis of the Dewey-Childs-Counts group in the "progressive education" movement. Counts says the task of the school is to "civilize the industrial giant."[26] Dewey finds the key to the educational situation in reconstructing the school so as to utilize various forms of occupations typifying social callings in order to bring out their intellectual and moral content. But he acknowledges the danger of occupational education's degenerating into mere trade training. As such, education would become "an instrument of perpetuating unchanged the existing industrial order of society," instead of operating to bring about a society "in which every person shall be occupied with something which makes the lives of others better worth living. . . . It denotes a state of affairs in which the interest of each in his work is uncoerced and intelligent." We have not reached such an ideal state, but Dewey sees the process under way and the obstacles not insuperable.[27]

Thus the role of the school in occupational education is a dual one. It is concerned with a thoroughgoing orientation to industry and the relationship between the work we do and the lives we lead. It is also concerned with making the conditions of work more meaningful both as it builds attitudes and understandings of the individual and as it invites critical consideration of current work relations. Although the school is concerned with orientation to the present industrial scheme and induction into the work world as it now exists, it is not regarded as an apologist for that work world. We cannot expect basic changes, we cannot expect "civilization of the industrial giant," unless the school plays its part in bringing the full meaning of modern industry before the consciousness of all the people. "The school," says Bode, "is the institution in which democracy becomes conscious of itself."[28]

4. The Occupational Program

Of what nature are the experiences that occupational education would utilize? The range of activities is indeed wide. Production jobs in school have probably been the first occupational activities undertaken as part of formal education. In this case the emphasis has been on simulating actual commercial or industrial conditions (including agriculture as an industry), and on producing some useful object: not a delicately machined piece of metal which ends up as a paperweight. Second, part-time education has been tried with the hope of making it operate full-time in the lives of the students, with the curriculum handed up to the school from occupational experiences. This includes various cooperative plans of education in which the student spends part of the day or week at a job, part in school; continuation school arrangements where there is no direct connection and where school is often an added burden to an already overworked youngster; and work experience programs in which there is no curricular connection between work and school, but jobs are obtained and supervised for the student by the school. Third, the Civilian Conservation Corps and the National Youth Administration established during the depression work camps in the public service, resident centers that combined production and education, and work projects performed in school, albeit not related directly to the pupil's studies. Fourth, community and school service projects have become increasingly important in various places. Fifth, school farms, camps, and factories have been employed in order to give occupational emphasis to the school program. Chapters VI and VII will describe in some detail efforts made in these five areas in schools both in America and abroad.

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[26] George S. Counts, *Secondary Education and Industrialism* (Cambridge, Harvard University Press, 1929), p. 69.

[27] John Dewey: *Democracy and Education* (pp. 368–70). Copyright 1916 by The Macmillan Company and used with their permission.

[28] Boyd H. Bode, *Democracy as a Way of Life* (New York, Macmillan, 1939), p. 95.

As the occupational education program makes use of some or all of these experiences, the main emphasis is on general educative values, not on specific training. In order to acquire insight into the nature of our work world, the student participates in the major areas of production: agriculture, homemaking, manufacturing, distributive trades, office occupations, social and professional service, and the public services. In each of these the student will have to apply himself to a specific type of work and learn some rudiments in each field. The purpose, however, is to provide the student with an experiential basis for learnings in all fields, and with some sense of the interrelationships and interdependencies of the various jobs men do. Thus, the doctor's son will know what the miner does and how he lives, and the miner's son will know something of the work and life of the doctor. On a basis of firsthand acquaintance the student develops a general understanding of our complex world and at the same time he builds a basis for his own vocational choice. The choice he makes determines the specialized education in his last year of high school—specialized application that will prepare either for the initial competency required in the chosen industry or for entrance to a college or technical institute as the means toward the career chosen.

Participation in and study about these major occupational areas serves as the core, or center, of the school's program. The traditional "subjects" are displaced from the center and a reorganization of their content is required so that students may see how the cultural heritage functions in the work that men do and the leisure they enjoy. The academic disciplines cease to be ends in themselves and become resources which are tapped to bring out the scientific, social, ethical, and aesthetic significance of man's work and life.

Centered around the core are the other services of the school described in the discussion in Chapter IV of the core approach: physical development and health, training in use of learning tools, individual interests and their development, and student government. Occupational preparation has been absorbed into the core as part of general education, because the common activity of mankind *is* productive endeavor even if this endeavor does find expression in diverse channels. Wherever fruitful, these school services may well be related to the core in order to broaden its approach and enrich its content. Forced and artificial connections, however, should be avoided. Student development, not a doctrinaire unity, should guide program organization.

The following two chapters will present a survey of occupational activities that have been employed in the past and present. Chapter VIII will extract from these experiences the activities that seem most fruitful in contemporary America. Chapter IX will then attempt the organization of these experiences into a sample curricular pattern. First, however, a digression will be made to indicate how a program of occupational education takes cognizance of implications that have been drawn from the fields of social and psychological theory.

5. The Values to Be Achieved

A. BASIC VIEWPOINT: MAN, WORK, AND SOCIETY

Education through occupations is felt to represent a valuable approach because it takes account of findings drawn from social theory, psychological theory, and the study of the problems of adolescence. The remainder of this chapter will attempt to indicate how occupational education meets the requirements implied by these findings.

The basic point of view expressed has been that man builds his culture through his work. From it grow his arts and sciences and the basis for his social institutions. Around it he integrates his life activities. Social interaction, including work relations, is the basis for the emergence of language, consciousness, intelligence, and individuality.

The occupational education program, by providing participation in and study of productive occupations, forms the basis of understanding and participation in the arts, skills, and social relations. With a social orientation rather than a personal-profit frame of reference, the school can build a concept of work as social service, thereby building a respect for work and the dignity of labor. Second, the program provides a plethora of social experiences in a real (i.e., non-cloistered) world as a basis for intelligence and individuality in facing the actual conditions of life. The student, through participation in the community and its work, comes to see that society and its institutions are not "givens," not unalterable axioms, but flexible and by reason of man's consciousness infinitely improvable. The student develops a feeling of man's competence as a maker, doer, and willer in all fields. He builds a consciousness of a world about him that is man-made and susceptible to change, not authority-dominated and changeless. As he experiences success in his own productive efforts, he learns the meaning of individuality and creativeness and their significance in promoting progress. In developing his own individuality, he comes to realize that individualism is not opposed to social control. He sees individualism as the result of social relations, and is helped to realize that individualism is not an end in itself but a means toward social service, including social reform.

B. OUR SOCIAL INSTITUTIONS

The belief has been expressed that our major social institutions have all been fundamentally affected by the new machine-and-power age and its modes of production. Industry has reacted with greater concentration of power and population, the growth of a landless "proletariat" (both urban and rural), the destruction of the skill hierarchy, a de-personalized human relation in the work world, and the disappearance of beginner jobs for youth. Occupational education recognizes this series of changes in various ways. First, it provides participation in contemporary productive enterprises as a basis for a realistic understanding of current industrial relations. It stresses general work habits rather than specific work skills as the means to vocational preparation, and numerous tryout experiences as the means to the selection of a career. Second, it provides discussion and study activities which stress new knowledges and skills, particularly as they relate to the new machine civilization. These studies aim at bringing out the full meaning of occupations to rescue them from becoming meaningless drudgery. Third, the school itself takes the responsibility for providing work experiences to replace the beginner jobs that are now disappearing.

It has been pointed out that the break in the skill hierarchy has brought with it decreasing opportunities for upward social mobility and consequent dangers of class stratification. Occupational education approaches the problem of mobility by disclosing opportunities for advancement to those who are capable and who seek it by pursuing a positive program of adjustment to one's vocational choice, and by focusing attention on the need for decreasing the gap between remuneration for different kinds of work through underscoring work as a common, socially useful activity.

The emergence of the social service state and the expanding functions of government have been cited as necessitating a greater degree of social sensitivity and a wider-awake social consciousness than we have had so far in America. Occupational education moves in this direction by placing students in actual work and public service situations that (1) bring home the pervasive effect of government in our lives, and (2) expose social, political, and economic conditions that require attention in our society.

The effect of our new world on the family has been to diminish its integrative function in life, as work, education and recreation have departed from the hearth. The family continues to be important as concerns affectional relations and the rearing of children. The smaller family and labor-saving devices increase the probability of careers—voluntary or paid—for married women. The occupational education program faces changes in the family first by including in its orientation to each occupation the influence of that vocation on family living. Second, it considers homemaking an occupational field for both men and women, requires a home project of boys and girls, and focuses attention on human problems of home and family living. Third, it helps girls to see the place of women in the industrial world and also helps them to prepare for useful work they may wish to engage in after their children have grown up. At all times, chores around the house are regarded as activities with significance for occupational education.

Last, leisure-time activities have grown to the point where they represent more of man's time than his work activities. This increased leisure demands more than relaxation alone: it requires creative activity of some type if it is not to be filled with meaningless, time-filling pursuits only. The occupational education program focuses attention on recreative activities that are consonant with actual social and work activities in the world we know. This requires adequate attention to "relaxation" pastimes—movies, radio, attendance at sports events—as well as active participation in experiences leading to enriched social relations and expression of talents and skills in all fields, unrestricted by the arm of necessity that hems work in. Constructive work for enriched leisure can be correlated, too, with constructive work for an enriched livelihood.

C. PSYCHOLOGICAL MANDATES

From the field of psychology and personality development, various inferences were drawn in Chapter II as guides to a psychologically valid program. How does education through occupations meet these criteria?

First, the schools have the responsibility of presenting experiences basic to structuring experience. In the past, assimilation of occupational experience has been left to chance. This may very largely account for the apathy with which many people face jobs which apparently have no meaning for them beyond the weekly paycheck. Aware that it is the student who must structure his experience, the school may still provide guidance that will help the learner see the meaning of his work and make it possible for him to organize a single structure that includes living and working rather than two disparate "lives." This integration requires appropriate orientation, intelligent choice, full understanding of the career chosen, and a high level of skill in that career. It requires appreciation of the dignity of labor, which cannot come through eschewing all labor, if "ego" needs—self-respect in particular—are to be satisfied. And just as the school has an obligation to help the student tie the aspects of his life together, it should provide those experiences which tie together community and individual interests. Through participation in the community's occupations and service to the community, occupational education can help the student structure his experience into an integrated unity and build an understanding of himself and his relation to society.

Second, since behavior is goal-directed, the school should take cognizance of those goals which have the greatest driving force in the lives of its students. Both the psychological analyses and the statistical surveys cited in the sections above list emancipation, social adjustment, and vocational planning and placement as the prime goals of youth. The role of employment as a means to achievement of the other two ends is generally stressed. As the school brings into focus the occupations men live by, it may provide real, visible, meaningful goals that will motivate not only skill perfection but also learnings in the natural and social sciences, the arts and leisure-time activities, homemaking and citizenship that living an adult life (symbolized by responsible participation in occupations) brings into bold relief.

Third, since education must take into account the learner's level of aspiration, it must give due attention to individual differences, to success and failure possibilities in the situation the individual faces. Perhaps nowhere so much as in occupations are opportunities found to suit activities to individual abilities. In almost every occupation, from farming to caring for the sick, there is a job for each level of skill and native ability. A well-guided program making use of

occupational activities can thus provide a suitable proportion of success experiences which can serve to raise the aspirational level to the maximum attainable by each learner without threats to security and adequacy entailed in failure experiences. Moreover, working in groups—at times consisting solely of age-mates, at times consisting partly of adults—the learner is influenced by the group's aspirations, which school guidance and adult contacts may serve to keep high.

Fourth, the laws of effect and closure indicate that the performance of useful tasks—producing usable goods or providing desired services—should serve to reinforce learning or develop new insights. Visible, intrinsic results rather than the extrinsic reward of a grade make the occupational activity educationally more effective than traditional activities remote from the world of living and doing.

Fifth, findings on the relative values of whole and part learning would indicate that the best way for the maturing adolescent to adjust to the world awaiting him is to partake in it first and to learn specific skills, information, and attitudes as a later, differentiating process. Present practice is to reverse the program psychology commends. Thus, the student learns separately at present about people, social relations, civic machinery and problems, science, and social institutions in preparation for living in a society in which these are all intermingled; occupational education would help the student participate in society and make his differentiations as he participates.

Sixth, what we know about transfer indicates that learning is most valuable when acquired in those situations in which it is to be used. Current differences between business ethics and Sunday-school ethics exist because the two are learned in vastly different situations. If the school wants its students to apply their attitudes and information to adult life, it will make sure that those attitudes and information are acquired in working and living situations that characterize adult life—in occupational and social activities in particular.

Seventh, awareness of the total situation in which learning takes place requires attention to the persistent problems of individuals, to emotional concomitants of learning, to the group process which takes place. No program of itself is going to solve the pressing personal problems of each student, but the greater the variety of experiences available and the greater the flexibility of the program, the more likely is the individual to find solutions to his own problems. The limited nature of the within-the-walls program does not offer this variety and flexibility. Neglect of emotional concomitants as regards work (which is so neglected in schools that students must regard it as unworthy of the attention of their pedagogs, says Plant) has served to reinforce white-collar prejudices and to bolster professional goals that are often unattainable, while stimulating the idea that work is something we would rather forego so that more time might be spent on a vacuous "culture." If we want to develop desirable attitudes toward work in order to facilitate vocational adjustment on leaving school and in the years ahead, we must provide experiences that stress the dignity of labor and the possibility of personal satisfaction that comes with knowledge of a job well done. Further, in situations artificially controlled, as in the teacher-dominated classroom, interaction of members in a group is often kept *sub rosa*, officially unobserved by the school. Real work situations should force the school to take the group process into account, and should help the student evaluate his own participation in group endeavors and his adjustment to other members of the group.

Eighth, recognition of the function of consciousness in learning and of the adolescent's need to build a role for himself implies the school's responsibility (1) for bringing to the level of consciousness attitudes toward work, habits of application, awareness of the significance of one's work; (2) for aiding the student to formulate a role for himself and to evaluate it realistically in practice. In real work situations the adolescent has the opportunity to work with adults and grow in his adult role; he has real experiences by which to measure the appropriateness of his own behavior as it reflects a sex role; he has a yardstick of consequences by which to measure his developing ethical code. By this means, and to the extent that occupational orientation is achieved, choice situations come upon the youngster more gradually and under the guidance of the school. Some of the major decisions the adolescent will have to make are therefore fraught with less conflict than might otherwise accompany them. Having real situations with which to work, the school has meaningful ground in which to develop desirable behavior in face of conflicting values and purposes in our culture.

Of course it is conceded that any program can be reduced to ritual and formula if not properly understood and applied. This is no less true of education through occupations than of any other program. The activity program in many elementary schools became a mere fetich of activity for its own sake. The polytechnical program in the Soviet Union often descended to production for its own sake with little regard for educational objectives. The occupational program, like all others, depends in the last analysis upon the understanding and skill of the teachers who guide it.

In proportion as occupational education helps solve the adolescent's problems of emancipation, of finding his appropriate role, of adjusting to the group, of meeting choice-situations, and of making the transition to adult life, the occupational focus serves to enrich the education of youth. In proportion as it orients the student to the nature and significance of our present industrial world, as it develops a social sensitivity and conscience, as it helps solve problems of social mobility, family living, and leisure-time pursuits, occupational education arms the youngster to meet the culture. By making use of active participation in the community's work world and its social interaction, occupational education promises to keep those proportions high.

CHAPTER VI

Occupational Patterns: 1. Abroad

Learning through occupations is not a new thing in the history of the world. We do not have to look far backward in Western culture to find education and occupation carried on simultaneously in the home. Universal secondary education is too new a thing for us to overlook the fact that a far greater proportion of American youth were obtaining *education* than the 9.3 per cent who were graduated from high schools in 1910. The education of the majority was not a matter of schooling, it is true, but it was an introduction, nevertheless, to social, economic, and political relationships, to the application of science and mathematics, to the place of the arts in the contemporary scene, to the uses of leisure. And by and large, whether at the family fireside, at the forge, or at the foundry, that education was carried on through occupational experiences.

What is new is not education through occupations but an effective introduction of education through occupations into the schools. The secondary school, as long as it was a leisure-class institution, could not very well center its program around occupational life, which by tradition it scorned. However, attention to occupations has come from two directions. The philanthropists, on the one hand, found in education a means of regenerating the de-pauperized masses, and some of them found it natural to use occupations in that education. Advocates of democracy, on the other hand, insisted that the school enlarge what had been a leisure-class attendance; where consistent and thoroughgoing, they discovered the need to replace the leisure-class content, too, with content more appropriate to a democratic society—the community's shared work.

As a result, a survey of educational practices both of other countries and of our own reveals a number of "pseudopods" pushing their way out from the protoplasmic masses of general and vocational education and groping toward a kind of experience that capitalizes on the general educational values of occupational training. These occupational experiences are distinguished from conventional school activities by production of useful articles, by service to the community, by work performed in youth camps, by taking care of one's own needs, by paid and gratuitous employment, by courses that attempt induction into the occupational life of adulthood through correlation of classwork with the occupational activities indicated.

In many cases these programs are the outcome of well-thought-out policies that are tied to political and social reorganization of whole cultures. This effort is evident in the Soviet Polytechnical Education scheme, the Gandhi Wardha plan, and the Israeli Labor Schools. By and large, however, "pseudopod" is an apt characterization, for the gropings are generally blind extensions of the school program without any basic reorganization of the parent mass and without reconsideration of fundamental objectives. Narrow, immediate needs take precedence over general values to be achieved; yet in satisfying these immediate needs the ultimate goals come nearer fulfillment. Camping experiences are introduced to acquaint youngsters with the out-of-doors, perhaps to train guides and woodsmen; after-school work experience is employed to supply needed funds and to develop "work habits"; cooperative work-study takes its impetus from the need for skill development; production jobs carried on in school aim at the same kind of training. Yet how much more meaningful the pregnant possibilities that are too often glossed over: camping, work experience, community service as methods of seeing a world at work and learning its implications by guided "doing" in the vital, productive, consuming world! In this way specialized skills and occupations make a contribution to general understanding—to general education. This would seem to be the path toward vitalizing the "learning by doing" principle on the secondary level.

The present chapter will discuss occupational "pseudopods" in Europe and Asia, the following chapter the American counterparts.

1. Hofwyl

One of the early efforts in modern times to center education around work was Phillip Emmanuel von Fellenberg's establishment of the Institute at Hofwyl in Switzerland. Temperamentally a reformer, Fellenberg felt the need of improving agriculture and the character of the lower classes in Switzerland in the Napoleonic era. An admirer of the contemporary Pestalozzi, he believed that regeneration of his native land was to be accomplished not through political reform but through thoroughgoing education of the populace.[1] Fellenberg acquired a farm at Hofwyl in 1799 and proposed to operate it both as a model farm and as a school. His method was to make use of possibilities that lay in group living and working to achieve his goals. Thus, communal tasks were undertaken —such as the building of a companion school and development of a farm on submarginal land—and, in addition,

> . . . to connect exercise as much as possible with habits of industry, each pupil, who is capable of such a task, is provided with a *small portion of ground to be cultivated as a garden*, whose fruits offer him a reward, and at the same time an encouragement for foresight, labour and perseverance.[2]

A nineteenth-century apostle of integration, Fellenberg based his philosophy on an insistence that there be "harmonious development of the whole child," that the development of physical, moral, and intellectual powers and their application in an occupation "march harmoniously together" in keeping with the "necessities of the individual."[3] A harbinger of the activity movement of a later century, Fellenberg is quoted as saying, "That only which a man produces by combining the materials presented to him, or which he, to a certain degree, reproduces in his imagination until it becomes a part of his own train of thought, can be considered as a real acquisition, or can contribute satisfactorily to the development of his mind."[4]

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[1] W. C. Woodbridge, *Sketches of Hofwyl*, originally published in *Annals of Education*, 1831–9, reprinted in *Letters from Hofwyl by a Parent*, Anon. (London, Longman, Brown, Green and Longmans, 1842), p. 366.

[2] *Ibid.*, p. 244.

[3] *Ibid.*, pp. 236 and 279–280.

[4] *Ibid.*, p. 280.

Fellenberg approached his tasks as a philanthropist. He realized that the class he sought to uplift would need, first, a new self-esteem, and he knew that an enhanced self-respect would come only if his educative procedures laid stress on the dignity of labor. Fellenberg proposed to do this

> . . . by inspiring attachment to the ground they cultivate, by leading them to find happiness in this employment of their faculties, and in the result of their labours. It is asked how shall this be effected? Fellenberg replies, by improving agriculture, by rendering it honourable, by elevating its importance in the eyes of those who are called to exercise it.[5]

To this work is added education both through orientation to the agricultural background and through cultivation of intellectual and moral "faculties" so that the learners "may understand the processes they perform, and appreciate the importance of the advantages and the duty of industry, instead of engaging in it as an irksome mechanical task." [6]

These ideas on the integration of the individual and the use of active occupations as a means to learning found expression in the farm-school which was open to students from six to twenty-one. Because the older students, from fifteen upward, produced more value than they consumed, the school was self-sustaining. The farm work was the central activity and the core for school work. Fellenberg started with derelict children, eventually opened a separate department for middle-class children, and in the several decades of his work educated even some members of the Russian royal family in his school. Through Woodbridge and Neef the Institute had some effect upon American academies in the first half of the last century.

"Industry," Fellenberg maintained, "is the constant moralizer of man." [7]

2. The Danish Folk Schools

Sir Richard Livingstone in recent years has done much to publicize the Danish "folk school," purporting to find in it valuable suggestions for the reform of education in England. With others he regards these folk schools as largely responsible for the transformation of Denmark into one of the most progressive and prosperous democracies in Europe before that country was submerged at the outset of World War II.

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[5] *Ibid.*, p. 320.
[6] *Ibid.*, p. 321.
[7] *Ibid.*, p. 327.

> It is the only great successful experiment in educating the masses of a nation. It has reached the very classes for which we have done little or nothing. It has taught them to care for subjects like history and literature which seem remote from the man in the street. It has transformed the country economically, given it a spiritual unity, and produced perhaps the only educated democracy in the world.[8]

The Danish Folk High School differs from the usual secondary school in two respects. First, it admits only such students as have passed their eighteenth birthday; second, it is a residential school for adults who work to support themselves. A three-month session is held in the summer chiefly for women and a five-month session in the winter chiefly for men since most of the students are employed in farm work. Nikolai Frederik Severin Grundtvig, the Danish poet-philosopher who started the folk-school movement, was convinced that "the period of boyhood is not the right schooltime." A boy finds it hard enough to orient himself to the external world; he should be in the open learning farming or some other trade, engaging in healthy manual work. Davies quotes the founder:

> The only good boys' school . . . that I have any idea of is the houses of good and industrious citizens, where the boys can get both a liking for the trades they will afterwards practise, and a grasp of them.[9]

Grundtvig was not interested in an occupational education *in* his schools; he wanted his students to have had their entry into occupational life before they came to the secondary school so that there might be what Livingstone was later to call "cross-fertilization of theory and experience." The latter endorses contact with the practical world prior to secondary education, to "sharpen the appreciation of the value and purpose of education, and, especially in the humanistic subjects, make their real meaning far more intelligible."[10]

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[8] Sir Richard Livingstone, *The Future in Education* (Cambridge, England, University Press, 1941), p. 44.

[9] Noelle Davies, *Education for Life: A Danish Pioneer* (London, Williams and Norgate, 1931), pp. 85–86.

What Grundtvig wanted, and what the folk schools developed, was a "school for life." Scholarship, Grundtvig felt, was one thing, education and fitness for life another. He proposed to take adults and educate them so that they would return to their former work "with increased pleasure, with a clearer view of human and civic relations especially in their fatherland, and with an awakened happy feeling of the national fellowship which makes them sharers in everything great and good which has hitherto and shall hereafter be achieved by the people to whom they belong."[11] In this purpose the schools seem to have been successful. In the period reported by Olive Campbell, 95 per cent of the students came from rural areas; of these, 89 per cent of the men and 96 per cent of the women returned to the farm.[12] To Americans this was extremely significant since "the great majority of young people who passed through our high schools, public and private, and even through our agricultural schools, and especially our colleges, were not going back to the soil."[13]

The folk schools put an early emphasis on literature (particularly singing) and history, and were slow to introduce vocational subjects. Eventually agricultural schools were set up as sister schools of the folk school. But in these schools, too, prior practical experience was required—three or four years on the farm and a winter at the folk school being the desiderata for entrance. Yet even now, in the folk schools, the main emphasis is on literature, history, gymnastics, and singing.

What, then, is the significance for occupational education of a school which prefers that occupational experience be gained prior to entry? First, it indicates that even unguided work experiences followed by a short, intensive immersion in the arts during adulthood can achieve more desirable attitudes toward the heritage and one's work than the four-year rigmarole imposed on "pupils in whom no intellectual faculty except that of memory and possibly imagination is fully developed." [14] Second, it discloses the mistaken emphasis on academic disciplines when the goal in America, as in Denmark, is not scholarship, but enriched living.

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[10] Livingstone, *op. cit.*, p. 38.

[11] Quoted in Davies, *op. cit.*, p. 93.

[12] Olive D. Campbell, *The Danish Folk School* (New York, Macmillan, 1928), p. 325.

[13] *Ibid.*, p. vii.

3. Polytechnical Education in the USSR

Based on theory worked out by Marx and Lenin, a thoroughgoing plan for centering education around participation in work was put into effect in the Soviet Union after the Revolution and apparently enjoyed wide extension until 1937, when the school workshops were liquidated, the study of labor as an independent subject was dropped, and the schools became once again "a purely academic institution." Maurice Shore in a volume entitled *Soviet Education* gives a rather comprehensive account of the history of polytechnical education, starting with its foundations in Marxism, describing efforts to put the plan into practice, and discussing criticisms and withdrawal of the program.

The rise of the proletariat in Russia was bound to lead to a new orientation toward work and toward efforts to make the school a medium for enhancing the dignity of labor. Writing in the heyday of polytechnical education, Pinkevitch asserted:

> Our pupil must feel himself a member of and a worker in a laboring society; and the attainment of this result marks the first step toward an understanding of the interests of the proletariat and of the mutual struggle for the social revolution. Some four or five hours a week in a manual training class will achieve nothing in this direction. What is needed is an ideological concentration about this axis, an organic integration of labor with the scientific, artistic and social work of the school.[15]

The plan that the Russians hit upon to make work more meaningful was to set up a *poly*technical, rather than a monotechnical, education. Orientation to many fields of work rather than training in just one was the keynote. This orientation included four elements: a combination of education and productive labor, acquaintance in theory and practice with fundamental forms of social production, scientific knowledge of the fundamental productive processes, acquisition of skills to deal with the basic instruments.[16] Pinkevitch quotes Mme. Lenin (Krupskaia):

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[14] Livingstone, *op. cit.*, p. 37.

[15] Albert P. Pinkevitch, *The New Education in the Soviet Republic*, translated by N. Perlmutter and edited by G. S. Counts (New York, John Day, 1929), p. 155.

> This does not mean a school in which one studies several trades, but rather a school where children learn to understand the essence of the laboring processes, the substance of the labor activity of the people, and the conditions of success in work. It is a school where children learn to know the extent of their powers.[17]

Stressing the fact that mere trade training was not the goal, Pinkevitch declares, "Polytechnical education aims, before everything else, at linking up manual work with general instruction, and at giving a broad idea of the chief branches of industry with which manual work can be coordinated." [18] Labor was primarily a method, only secondarily a content.

In practice various methods were employed. School farms and factories or workshops were one approach. Another involved associating a school directly with a running plant in which students spent half their school day. Even mine schools were operated in which the student's productive work consisted chiefly in making iron and wooden equipment needed about the mine. Few "exercises" were employed in the school; "the whole plant was conducted on an extremely practical basis." [19] In many cases close similarities can be seen to the Henry Ford Trade School, which will be described in the following chapter. It is frequently referred to by Soviet writers on education; on this side of the Atlantic, instructors at the Ford School recall the visits and detailed study made by the Russians in Detroit in the Twenties.[20]

As the program developed, various shortcomings in application became obvious. Krupskaia made a plea for moderation: the teachers were often short in the preparation necessary to make the scientific and social meaning of work clear; they were unskillful in combining practical work and theory; they tended to ignore theory completely. At times instructors became more interested in production than in learning. An uncontrolled situation led to the reinstitution of an extremely formal program not consistent with the educational needs of all the youth.

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[16] Maurice J. Shore, *Soviet Education* (New York, Philosophical Library, 1947), p. 173. Quoted from Marx.

[17] Pinkevitch, *op. cit.*, p. 200.

[18] Albert P. Pinkevitch, *Science and Education in the USSR* (London, Victor Gollancz, 1934), pp. 30–31.

[19] Scott Nearing, *Education in Soviet Russia* (New York, International Publishers, 1926), p. 56.

[20] For description of several schools in the Soviet Republic, see J. G. Crowther, *Industry and Education in Soviet Russia* (London, Wm. Heinemann, 1932).

4. Gandhi's Wardha Scheme for Educational Reconstruction in India

A. THE THEORY

Except for the emphasis on handicrafts, Gandhi's plan for reconstructing Indian education is strikingly similar to the Russian polytechnical plan both in theory and in method. Gandhi proposes rural national education through village handicrafts:

> And "through village handicrafts" means that the framers of the scheme expect the teachers to educate village children in their village so as to draw out all their faculties through some selected village handicrafts in an atmosphere free from super-imposed restrictions and interference.[21]

> Literacy itself is no education. I would therefore begin the child's education by teaching it a useful handicraft and enabling it to produce from the moment it begins its training.[22]

The handicrafts are to be taught "scientifically" rather than "mechanically" so that the child may know the why and wherefore of every process. Gandhi regards the vocation, taken as a whole, as the best medium for the all-round development of a boy or girl. As a result, he would weave the whole curriculum around vocational training. He recalls his experiences at the Tolstoy Farm in the Transvaal, where vocational activities consumed nearly eight hours of the day with but one or at the most two hours of book learning:

> My point is not that the start should be made with the crafts and the rest should come in as auxiliaries. On the contrary, I have said that the whole of general education should come through the crafts and simultaneously with their progress.[23]

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[21] Mohandas K. Gandhi, in *Educational Reconstruction* (Wardha, Hindustani, Talimi Sangh, 1939), p. vii.

[22] *Ibid.*, p. 4.

[23] *Ibid.*, p. 12.

Social considerations are basic to education through work. Gandhi hopes to perform a "silent revolution" in caste distinctions and prejudices through stress on the dignity of labor, just as the Russians hoped to intensify class consciousness and pride of the proletariat through a similar procedure. Gandhi draws inspiration, he says, from a similar effort to raise the prestige of work in Palestine, where so serious an attempt had to be made to convert a commercial and professional group to one with a more favorable attitude toward manual labor:

> . . . they find the labour of their hands to be worthy in itself. It is made lighter by intellectual activity, it is ennobled by the patriotic ideal which it serves.[24]

The divorce of manual work from education had resulted in consideration of work as something inferior. The result, says Gandhi, is that India boasts of no Cromptons or Hargreaves since the weavers have had no education and the educated have had no weaving.[25] As a remedy he suggests three to four hours of joint daily labor in the corporate life of the school as a healthy and educative activity for all children, regardless of social class or sex. As industry is the inevitable condition of life, he would make it an end of instruction.[26] "The fact that the whole person in the boys and girls has to be developed through a vocation automatically saves the schools from degenerating into factories."[27] As students are encouraged to spin and help their parents with agricultural tasks, they will be made to feel their relation and obligation not only to parents and the village but also to the country.

B. THE PRACTICE

Putting the Gandhi theory into concrete form, the Zakir Hussain Committee worked out syllabi for the various cottage industries, rotating the curriculum around three centers: the child's social environment, his physical environment, and a basic craft. The craft was seen as the natural meeting point of both the physical and the social environment because man was viewed as having conquered nature in and through work.[28] Suggestions were made in the report for relating a considerable amount of mathematics, social studies, science, and language arts to craft activities. Two basic conditions were made prerequisite to selection of these activities: first, that the craft be rich in educative possibilities, and second, that the craft be a means toward enriching important human activities and interests. The objective was "not primarily the production of craftsmen able to practice some craft *mechanically*, but rather the exploitation for educative purposes of the resources implicit in craft work." [29] Basic to the region in which it was to be taught, the craft was to be (1) the medium of education which aimed at developing cooperative activity, planning, accuracy, initiative, and individual responsibility for learning, and (2) the core of the curriculum, not merely an added subject.[30]

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[24] *Ibid.*, p. 18.
[25] *Ibid.*, p. 127.
[26] *Ibid.*, p. 42.
[27] *Ibid.*, p. 55.

Acceptance of the program, as might be expected, has not been at all universal. First, objection has been made to the aim of making the school self-sustaining that Gandhi asserted was the "acid test of its reality." [31] Second, fear was expressed that the school's products would compete with industry. Third, and most fundamental, Limaye objects that the program is based on a wrong principle—"to teach the child to look out on the world through the one window of a craft, and to shut up all other openings." [32] It is interesting to note, however, that Limaye's alternative is the general-vocational dualism which has failed to bring notably successful results in the United States.

On the other hand, Kalulal Shrimali, in a doctoral dissertation on *The Gandhian Plan of Education*, notes these values in the program: (1) it serves to balance intellectual and practical activities; (2) it stimulates the spontaneous interest of children without degenerating into mere excitement or pleasure; (3) it transmits valuable and effective knowledge and develops desirable moral, vocational and social attitudes; (4) it spurs economic improvement of individual and community; (5) it puts to an end the cleavage between the learned and the unlearned; (6) it remedies the evils of the economic situation as it removes drudgery for the worker through clarifying the intellectual and social significance of the vocation, and as it discloses to the privileged classes the cultural values of useful work; (7) it develops faith in the method of intelligence, creates understanding, mutual tolerance, and sympathy between individuals and groups.[33]

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[28] *Ibid.*, Zakir Hussain Committee Report, p. 283.

[29] *Ibid.*, p. 122.

[30] Kalulal Shrimali, *The Gandhian Plan of Education for Rural India*, Doctoral Dissertation, Teachers College, Columbia University, 1947, p. 65.

[31] Gandhi, *op. cit.*, p. 8.

[32] P. M. Limaye, *Education in India Today* (Poona, Fergusson College, 1945), p. 12.

5. The Labor Schools in Israel

Hebrew education in Israel has faced a special problem which has made the occupational approach seem especially valuable and which has resulted in the development of Labor Schools on the elementary level which care for the educational needs of some 22 per cent of Israel's Jewish children. That problem has been developing a new orientation toward labor in an immigrant group long immersed in a white-collar and shop-keeping tradition. In 1922 the Histadrut, or labor organization, established a Central Cultural Committee, one of whose problems was organization of schools for the labor community. Parents and teachers faced many questions:

> Shall the school exercise absolute authority or allow for self-government by the children? Upon what principles shall the curriculum be determined? How shall the children's society be organized? What pedagogical methods shall be employed? What place shall physical labor occupy in education? How shall the study of the homeland and of nature be emphasized? Shall independent farms be opened alongside of the educational institutions? How shall labor values be fostered in the children's society? Which elements of traditional Judaism shall be highlighted in their education? How shall the children be taught to appreciate the arts?[34]

Before them they had the example of the General Schools in Palestine, which tried to combine the traditional Western curriculum with study of Hebrew and Jewish national and religious traditions, and the example of the extremely orthodox Mizrahi Schools, which laid such heavy emphasis on ancient religious writings that the current scene and reorientation to a new way of living and working were neglected. Noah Nardi conceded that the heavy curriculum of the General School might give the child a fairly adequate "liberal education"; however, "It cannot be said to prepare him for a life of labor, nor is the spirit of individual competition usually found in its classrooms likely to produce a cooperative and social attitude. . . . Language and book culture, constituting only one element in the existence of a group, can hardly be expected to equip a child for balanced and competent living." [35]

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[33] Shrimali, *op. cit.*, pp. 74 ff.

[34] Samuel Kurland, *Cooperative Palestine* (New York, Sharon Books, 1947), p. 124.

A. SOCIAL FUNCTION OF THE SCHOOL

The Histadrut had other aims. It sought loyalty to the new national state, but it also sought "to develop the body of the child and instill in him a love for labor . . . ; to foster in him those social qualities which will enable him to live harmoniously with his fellow man and give him a strong sense of respect for the democratic process in human life, for the rights and freedom of others and impel him to active participation in the life about him as a staunch fighter for the democratic way." [36] Especial attention was given to new attitudes toward labor because the conditions of the Diaspora had made the Jews predominantly a middle-class and bookish people, excluded, for the most part, from agricultural and industrial work.

Accordingly, it becomes one of the chief responsibilities of the elementary school to see to it that every Jewish child in Palestine, no matter from what social group he comes, is impressed with the central importance of labor in the pioneer community in which he lives, is given some measure of manual and prevocational training, and is imbued with love for the soil and understanding of the economic structure of society, of natural processes and man's part in them, and of the significant role played by growth and change in all life.[37]

Thus education in Israel had a deep social function for the Histadrut and its Labor Schools. Very much influenced by students of Dewey and Kilpatrick, the new schools also had an unusual respect for the growing personality of children. They recognized attempts being made by a few General Schools to experiment with progressive practices, criticized their "projects" as isolated attempts to regroup conventional subject matter around central themes.

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[35] Noah Nardi, *Education in Palestine, 1920–1945* (Washington, D. C., Zionist Organization of America, 1945), p. 200.

[36] Kurland, *op. cit.*, pp. 129–30.

[37] Noach Nardi, *Zionism and Education in Palestine* (New York, Teachers College, Columbia University, 1934), p. 73.

> The entire atmosphere and routine of the school remain conventional; the classroom hardly becomes a place in which the child lives and is introduced as fully as possible to the outside world, and the principle of labor, which should occupy so important a place in Palestinian education, receives scant attention.[38]

The same criticism was leveled against the few private schools which were aping the private progressive schools in America. "These schools, like American counterparts, stress freedom and esthetic expression and remain relatively aloof from the general life and problems of the country." [39]

The Labor Schools met the challenge of personality development by organizing the schools as "children's communities which govern themselves along democratic lines, are based upon self-labor, mutual aid and responsibility, and provide for most of their own needs." [40] In the same process they were meeting the challenge posed by the social functions of the school. Gardening and manual labor took five periods a week in the third and fourth years, six periods in the next two years, and seven periods in the last two—more than any other single subject was given.

B. UNITS CENTERING ON USEFUL WORK

Influenced by American educators and by the Russian experiments with "complexes" (or cores) that focused on socially useful work, the Labor Schools set as their goal extensive use of the "unit of experience":

> In the regular program of every Palestinian school, therefore, there should be a large number of units centered about or including various aspects of work in the school farm or garden, kitchen and shop. The garden alone can be the source of many units—geometry, arithmetic and design enter into the planning of the flower and vegetable beds;

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[38] Noah Nardi, *Education in Palestine* (Washington, D.C., Zionist Organization of America, 1945), p. 211.

[39] *Ibid.*, p. 211. [40] *Ibid.*, p. 37.

botany, zoology and meteorology into sowing, fertilization and growth; reading, composition, art and shop work may be related to the activities carried on in the garden. The vegetables, fowls and domestic animals of the school farm should help to supply provisions for the school kitchen operated, at least in part, by the children and giving them instruction in household chemistry and dietetics. Shop work, as we have already seen, can be connected with, and motivated by, almost any unit; it should train the children to make useful articles . . . for the school itself, and provides a valuable opportunity for the study of the elements of drawing, design, geometry and arithmetic. It goes without saying that drill and connected study must reinforce the application of various subjects in units.

In connection with their own manual and agricultural work, children should be taken on supervised trips to farms, orchards, factories, building operations, chemical and power plants, etc. Excursions of this sort would supplement the labor education given by the schools and help the children to understand modern society more clearly.[41]

Nardi admits quite readily that theory has not always been successfully translated into practice. Problems of training teachers, of overcoming the older subject tradition, of producing new materials are some of the obvious obstacles. There is objection made by a Labor School inspector to "undue stress upon the prosaic tasks connected with the necessities of everyday life, and too little stress upon work that answers a creative urge." [42] Often, the same inspector notes, students work too hard and too long. From another angle arises the problem of balance between labor and study, and parents sometimes complain of too much work and too little academic instruction. Still another objection is that the schools impart a partisan and class attitude rather than a feeling for Israel as a whole and for the religious and ceremonial traditions. This last objection has kept the Labor Schools out of the cities, including the very modern Tel Aviv, and confined it to agricultural communities.

Despite the shortcomings, Nardi sees in the Labor School a real and valuable reorganization of education that takes the best from American and Russian theory and practice and pushes it to its logical conclusions. On the personal side, he finds a desirable respect for the child's personality and the use of democratic methods to develop it: on the social side he sees the education of builders of a new national life with a faith in cooperative processes and a respect for the dignity of labor.

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[41] *Ibid.*, pp. 216–17.

[42] Quoted in Nardi, *Zionism and Education in Palestine*, p. 63.

6. Work Camps for Youth

Programs considerably less broad in scope than the national systems of education already discussed are found in the youth work camps. The present section will consider both the privately operated volunteer camps and the national youth camps that were developed in Europe before the war.

A. VOLUNTEER CAMPS

The seminal force in development of work camps as educative institutions has been the International Voluntary Service, sponsored by the Society of Friends and the pacifist International Fellowship of Reconciliation. In 1920 Pierre Ceresole, with the assistance of these organizations, brought together a group of young men, some of whom had fought on opposite sides during the war, and helped in rebuilding devastated areas in northern France. In the Twenties, work was performed in helping victims of landslides in Switzerland and in clearing away debris. A flood that caused considerable damage in Liechtenstein in 1928 stimulated a call by well-known Swiss educators that led to the recruiting of more than 700 volunteers from twenty-one different countries. The work lasted six months, each man serving an average of twenty-seven days. Seventy-eight women enlisted and did the cooking, cleaning, mending, and caring for the sick. Of the volunteers, 268 were students, 221 professional men, business men and clerks, 143 manual workers, laborers, and artisans. The movement spread to England in 1931, when a Quaker leader in South Wales requested assistance in providing recreational facilities where there had been an ugly dump pit. Similar work was performed in Shropshire and North Wales in succeeding years, and assistance to Swiss mountain villages continued. In 1934 an earthquake devastated a large area of Bihar, India, and volunteers from Europe spent six-month periods in each of the next three years helping to move the peasant villages to higher levels where they would not be threatened by floods following earthquakes. During the revolution in Spain, the Service helped evacuate children from besieged Madrid, on return trips bringing food and supplies.[43]

Through assistance to people in various areas, the camps have hoped to achieve results significant in the education of the participants:

> The camps are educational in the broadest sense of the word. They teach the discipline of labor, respect for manual work, and they give youth an insight into conditions in "areas of social and economic tension." Since the workers are of different nationalities, an opportunity is given for exchange of ideas concerning the problems of different countries.[44]

In the camps the founders disclosed a "moral equivalent for war," replacing military service in time of peace with constructive work, making it possible for youth "to undergo the rigors of battle, not with other human beings, but with the forces of nature." [45]

The movement, as it spread to America in the Thirties, will be discussed in its New World setting in the next chapter.

B. NATIONAL YOUTH WORK CAMPS IN EUROPE

In Europe as in America the depression of the Thirties seemed to hit youth hardest. Many European governments seized upon the experience of the International Voluntary Service Camps and of various other youth camps within their own countries to establish national camps for unemployed youth. In some cases they were voluntary, in others compulsory. In all there was an effort to combine removal of youth from a depressed labor market, especially in manual labor, with socially useful work.

In each country the type of work was adapted to the employment situation, traditions, and needs of the country. In Switzerland, voluntary work service was performed each summer by approximately 500 students, working for three weeks on projects of proved usefulness. Roads and trails were built to isolated communities, and clean-up projects followed after avalanches, floods, and fires.[46]

In Bulgaria enforced labor of all youth was instituted in the work shortage after the first world war. It remained in effect for many years to improve communication and travel in the country and to provide work and training opportunities for young men who might otherwise glut the labor market in the subsequent labor surplus. Preliminary training for the labor service took place in the schools where each year there was a compulsory labor week on projects determined by the local school board, with priority given to projects of direct value to the school. Lessons in cooperative living and discipline were general objectives aimed at in addition to acquiring work skills.[47]

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[43] Kenneth Holland, *Youth in European Labor Camps* (Washington, D. C., American Council on Education, 1939).

[44] *Ibid.*, p. 29.

[45] *Ibid.*, p. 7.

[46] *Ibid.*, pp. 51–69.

In Germany under the Weimar Republic the German Free Corps organized its first camps to "unite young people of their organization in 'common work and common play for the mutual understanding and enrichment of their life and outlook.'" Later they were incorporated into the Voluntary Labor Service which was backed by the government. In a visit, Holland found the campers normal and happy, freed of the hopeless look of the unemployed he had seen earlier in Germany's industrial cities. But more important was the absence of party emblems and bitter disputes ending in fist fights, which were so rampant elsewhere in the explosive situation immediately preceding the Nazi seizure of power. In some camps both men and women participated. An attempt was made "to impress all workers with the duties and responsibilities to the social order and to help them to understand their place in the life of the community." Acquaintance with labor was an important factor in reorienting many youth who had earlier entertained aspirations of entry into the overcrowded professions. The better labor camps developed by Republican Germany not only had completed work projects of great value by 1932, but had become an important part of the educational system. Afternoons and evenings were devoted to educational and recreational programs adapted to different types of workers. Holland reports the camps were so successful and popular that during the last few months of 1932 plans were developed to encourage all students who contemplated higher education to spend an orientation period of several months in them.[48]

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[47] *Ibid.*, pp. 39–49.
[48] *Ibid.*, pp. 70–90.

Great Britain faced her youth unemployment problem with various devices. Government training centers aimed at vocational training and placement. Instructional centers carried on a general educational program for morale-building following long unemployment. Physical reconditioning and summer camps involved work in forestry, roads, drainage, building bridges and grading. Junior Instruction Centers faced the problem of filling the gap between leaving school and finding employment. Without training youth for specific occupations, they aimed "to give them the type of mental and manual instruction which will help them to become absorbed or reabsorbed into employment as soon as an opportunity may occur." Attendance was compulsory between the ages of fourteen and eighteen for those youth who were both out of school and out of work. The English program was based on careful collection and dissemination of information on vocational opportunities, and it was crowned with unusual success in placement.[49]

The Czechoslovakian Labor Service was organized in 1934 following earlier private ventures to relieve unemployment, to provide education for unemployed youth, to train men in communal work. Tourist roads were constructed, work was performed on railways, streams were regulated, swimming pools were built, books and newspapers were reclassified in libraries. As far as possible, camps were self-governing. The program was non-military; educational courses were "expected" of all campers. Holland concludes that the Czech camps showed it was possible to provide for practical training in citizenship in a democratic state through a system of camps, by permitting the participants in the camp to have a large measure of self-government.[50]

7. Conclusions

The programs discussed in the preceding pages show some of the efforts made in the Old World to relate work and education. What are the values that characterize each of these programs which may be capitalized upon in reorientating secondary education in America?

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[49] *Ibid.*, pp. 147–78.

[50] *Ibid.*, p. 294.

First, the Fellenberg school at Hofwyl points to the values of resident education on a school-farm where productive labor is used to "integrate" the program and to "moralize" the youngsters. It stresses the importance of contact with the soil, of individual and community enterprises. The influence of the group and a growing respect for labor are relied upon to build character. In this way the Swiss pioneer hoped to educate the "whole child," and not just his intellect or potential for work alone.

The Danish folk schools, too, emphasize the values of resident schooling and lay an instructive stress upon withholding abstract education until an experiential basis has been laid for it. We are scarcely likely in America to interpose several years of work between elementary and secondary education, but we can well heed the lesson involved: the need of adolescents for practical experiences in the world of work as a sound basis for learning.

Both the Soviet polytechnical and the Gandhi craft-education schemes indicate a belief in the fundamental nature of work activities in school and in society. Each starts from the need to uplift a laboring class and from the degrading character of highly divided labor in modern industry. The Russians proposed to make work more meaningful through orientation to many kinds of industry, and to make education more functional as it dealt with productive problems. Gandhi proposed to vitalize education by putting the cottage industries at the heart of the school and to enhance the dignity of work by bringing out its full implications. Both make use of work as a "core" or "complex" around which other educational elements revolve. Both are concerned with integration of personality as a goal of education. The Soviet experiment illustrates the danger of plunging too precipitously into such a program; the Indian approach underlines a tendency to a craft-nostalgia whose unrealistic orientation in the present-day world should not go unnoticed. Some of the devices which the Russians employed may be of interest to us as we envision a program: the school-farm and school-factory representing school control of production, the factory and mine schools representing industrial control of the educational program, and school workshops and laboratories similar to productive work in our own schools.

The Labor Schools in Palestine are of especial significance because they have tried to attack directly one of the major problems facing American education today—the reorientation of parents and pupils and teachers who place undue value on white-collar traditions with a consequent lack of realism as affects vocational choice, the individual's abilities, and probability of placement. Of interest, too, is the fact that the Labor Schools have started from the same assumptions held in American education—respect for the personality of the child, faith in democracy, and a sense of the social responsibility of the school in reconstruction of the culture.

The voluntary work camps for youth combine the resident feature of the Fellenberg farm with a respect for work and an opportunity to study the work activities of the modern world. In these camps the emphasis has been put on the general values of work experience—brotherhood, cooperation, understanding of problems in social and economic tension areas. To a great extent these camps have dealt with middle-class youth and have provided them with an initial, and necessary, experience with manual labor. The national work camps exemplify both voluntary and compulsory programs and provide edifying examples of good and evil in universal, compulsory attendance. The Czech camps are of interest because of the democratic control and youth participation in administration as young men and women prepared to take their place as workers in a democratic state. The English programs point up the value of accurate occupational information as the basis for training and placement. The Bulgarian camps illustrate school preparation—through work performed as a part of the school program—for a universal labor service. The German camps gave rise to a feeling that working and living together—if begun early enough—could have tied youth together in such a way that it would have prevented the Nazi triumph in a divided Republic. In all these programs, work started as an end and eventually became the means to education of youth in the broadest sense.

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CHAPTER VII

Occupational Patterns: 2: American Pseudopods

THE American occupational pseudopods have in many cases taken the same directions as have their European counterparts. Here and there articles are produced in school shops for sale or other distribution. In some places schools operate factories, kitchens, or nurseries. In a few cases factories operate schools for youth, providing general education as well as job training. Some camps have been operated to capitalize on work values; others have been run with the social-living motif uppermost. In addition, some patterns have been employed in the United States that were not discussed in the preceding chapter. Work experiences have been utilized as part of education both with and without curricular tie-up and with varying degrees of school control. Schools have embarked on long-range programs to improve daily living conditions and on projects to introduce specific improvements in the community. Remunerative work experiences inside the school have been made possible—albeit as a relief measure—by federal provision of funds. Programs with particular significance for occupational education will be discussed here.

1. The Henry Ford Trade School

The Henry Ford Trade School,* Dearborn, Michigan, provides a unique combination of secondary education and productive work. High school-age boys alternate one week in classes with two weeks in shops inside the Ford Company main plant. The school's shops are distinct from the company's, but are situated on a gallery overlooking the starting point of the Mercury assembly line, and they turn out tools and dies destined for use in producing Ford motor vehicles. Since the state law prohibits operation of machines in factories by boys under sixteen, the fifteen-year-olds entering class spend their first year making repairs with hand tools on various items of equipment which the company sends to the school for refurbishing. Electric fans are restored to service, hacksaws sharpened, parts of larger machines repaired or replaced. Boys over sixteen work on each type of machine, in rotation. Careful bookkeeping insures completion of every operation considered important in the training of a machinist or tool-and-die-maker. The boys work from actual blueprints submitted by the plant with each job order and produce from one to a hundred pieces as required. The need for accuracy and precision in mass production of interchangeable parts is stressed, and the boys check their own work to tolerances that are at times as fine as one ten-thousandth of an inch. From the first day the student enters a shop, he engages in work which is to be used in the plant, ultimately to turn out a motor vehicle. No "exercise" work is considered necessary, or even countenanced. For the work done the school is credited financially by the company. In this way the school is able to pay each of its students a "scholarship," ranging from $8 a week for beginners to $35 a week for seniors, and to cover costs of instruction and maintenance on a self-sustaining basis.

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* Information gathered on a visit to the school, September 10, 1947.

The objective of the school is the training of craftsmen. Boys are carefully selected from ninth grade graduates in the area (metropolitan Detroit) and are subjected to a fairly rigorous program of academic studies in their classroom work. The attitude of the school to assembly-line workers is one of condescension; *their* boys are being trained to make the tools and dies which determine the work of the assembly line; it is hoped that they will eventually attend the apprentice school which is an integral part of the company, and later the supervisors' classes, ultimately to become part of Ford's top management personnel. Giving emphasis to the fact that supervisory personnel no longer represents simply the best workers in the old era of craft production, Ford has set up its own schools as paths to upward social mobility. The Trade School has been in operation thirty-one years; many of its graduates hold top technical positions in the motor company today.

In the shops the atmosphere is one of complete realism. The boys work with intensity, interest, and obvious pride under competent supervision (about one shop instructor for each eight boys). They are learning to take their place as adults in an adult economy. Although spoilage is recognized as educational in value, it does not exceed 1.5 per cent, considered a respectable average for a going machine shop. Work attitudes stressed include safety, orderliness, accuracy, speed, and originality.

Around the work in the shops lie the related technical training in mathematics, science, and shop theory (for which the school has produced its own texts, functionally organized), conventional English, American history and civics courses, and two rather unusual courses in technology and economics which are meant as orientation to modern industrial conditions, using the automobile industry as a point of departure. The two courses are closely related to industrial processes and organization as typified in the Ford plant. Once a week a visit is made to the plant or to neighboring agencies; once a week a motion picture is shown to orient students to the modern world of industry. In the economics course, speakers from the company and the community discuss with students basic features and problems of modern industrial organization but with particular reference to the Ford Motor Company and the automobile business. A sample two-week schedule in the technology course follows:*

Monday	Utilization of wind and water power; simple machines and prime movers
Tuesday	Examples of industrial salvage: paper mill, cement plant
Wednesday	The Industrial Revolution in England and the United States; Growth of the "Factory" Idea
Thursday	Visual aids: Yellow Magic, King Cotton, Modern Coal Mining, Magic Power
Friday	Discussion, review, test
Monday	Handling and processing of basic raw materials: iron, limestone, coal
Tuesday	Trips: plastic division, print shop
Wednesday	Today's mass production methods; precision and interchangeability of parts
Thursday	Visual aids: This Plastic Age, The Shape of Things to Come
Friday	Discussion, review, test

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* From schedule for school year 1947–48.

The topics included appear to be fraught with significance in the modern technological age. It is fitting, however, to question the provinciality of a program which sticks so closely to the Ford domain and the automobile industry. Nevertheless, a good example is afforded of Dewey's claim that the occupation serves to organize historical, scientific and civic learnings.

The philosophy behind the Ford school is summed up in an address delivered at the University of Michigan by the present director, S. D. Mullikin.[1] First, it is felt that education should fit a boy for a place in the world. Second, work is regarded as an indispensable part of education—for intellectual development as well as for acquisition of skill. Third, educational work should be useful. Fourth, it is best pursued in connection with a going concern which represents in a tangible way historical and scientific development. Fifth, education should be self-sustaining. If work is to yield its fullest educational value, says Mullikin, it must be useful and performed under the same sense of values and responsibilities which characterize all true work; otherwise the whole developmental value of the work is lost.

2. Production in School Shops

The merits of industry-sponsored education are evident, but the attendant dangers of paternalism and exploitation in the "vestibule" school should be equally apparent. In the United States we are committed to public control of education because we consider education a social force. The public should not readily abdicate this control to private employers, and except where there is public control of production, it would seem hazardous to permit too close an association of school and industry, with the proprietor's conscience as the sole bar to exploitation of youth. While pleading for occupational education, Dewey stresses the responsibility and opportunity of the school:

> Under unfree economic conditions . . . work or industry offers little to engage the emotions and imagination; it is a more or less mechanical series of strains. Only the hold which the completion of the work has upon a person will keep him going. But the end should be

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[1] S. D. Mullikin, Address delivered at University of Michigan, July 23, 1947 (multigraphed, Dearborn, Mich., Henry Ford Trade School, 1947).

> intrinsic to the action; it should be *its* end. . . . The absence of economic pressure in schools supplies an opportunity for reproducing industrial situations of mature life under conditions where the occupation can be carried on for its own sake. If in some cases, pecuniary recognition is *also* a result of an action, though not the chief motive for it, that fact may well increase the significance of the occupation.[2]

In an effort to take advantage of the educational possibilities of production, many schools engage in making useful articles for sale or other distribution. Simulation of actual industrial conditions varies; generally no remuneration accrues to the student worker. In Buffalo* the Emerson woodworking shops produce about $30,000 worth of furniture annually for the Board of Education and other public agencies; in the Miller Vocational School in Minneapolis a retail store is operated by students to dispose of needlework, art-metal and graphic-arts products that students make in the school. A similar store is operated by the Central Needle Trades High School in New York City, selling men's, women's, and children's wear of all types. The bakery shop in the Dunwoody Institute in Minneapolis supplies the school cafeteria and operates a retail shop for the public on the school's main floor. In the auto shops at Dunwoody, the Milwaukee Vocational School, and the Essex County Vocational School in Newark, New Jersey, estimates are given and repairs made on automobiles that are brought in. The Connelley Trade School does printing for the Pittsburgh Board of Education. On Long Island, the Sewanhaka High School's print shop does all the school's printing, including a newspaper and a magazine. A nursery school and cafeteria at the Brooklyn High School for Homemaking provide "production work" for mothers, domestics, cooks, and waitresses of the future.

Problems in production work are numerous. In the pre-war depression there was constant danger of competition with private industry, the hazard of adding to the severe unemployment problem. In the post-war boom there was the difficulty of getting materials. A problem of coordination is involved in avoiding conflict between production goals and educative goals. Procuring trained personnel for supervision has been difficult. In those cases where production jobs have been a part of the program, some system of accounting has usually been installed to guarantee rotation of students from job to job so that the work would not become mere routine with limited educational dividends. Perhaps the chief problem is a necessity for correlating the work done in production with an understanding of the nature of production in our culture.

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* Midwestern schools visited September, 1947; New York area schools, November, 1947.

[2] John Dewey: *Democracy and Education* (p. 240). Copyright 1916 by The Macmillan Company and used with their permission.

A. ALLENDALE FARM SCHOOL

One of the interesting experiments in production in schools is the setting up of school "factories." The Allendale Farm School believes that "a culture is known by what it does and what it produces," and therefore:

> The responsibility of the schools is to provide opportunities for children to experience learning situations in which the technological as well as the human relationships of our democracy are present. This cannot be done through courses and credits. . . . Our students will not get the kind of insight they need to understand the relationship of man and the machine until they can participate in *real* creative enterprise.[3]

To provide these "*real* creative enterprises," the Allendale school has cooperated with community agencies to set up a toy and furniture factory, print shop, and food-processing plant.

> These work experiences will be the kind of activity around which the whole curriculum will be designed. After three months with this program, it is already evident that there is greater growth in the number of varied learning experiences than in previous formal classroom work. The need to expand one's environment in order to function in such real projects has made it necessary to extend the campus to the local town and nearby cities. It is through this integration of real living situations and directed learning that children will be able to adjust better to the intricacies of modern technology.[4]

B. BEREA COLLEGE

Significant applications of Fellenberg and the Danish folk school are combined in the schools in Berea, Kentucky. The founders of

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[3] William V. Vitarelli, "Tools for Learning," *Educational Leadership* (February 1948), V, 345.

[4] *Ibid.*, p. 345.

Berea College early perceived the need of the mountaineers for basic rather than higher education. They sought to bring adults as well as adolescents into the school and to prepare them for a useful life in the area rather than for professional careers which were consistently taking the best-educated youth out of the region that needed them most. Berea participated in the manual training movement of the nineteenth century, "but unlike most of the others dating from this period, Berea College still maintains a system whereby labor is required of every student as an integral part of his program." [5] While enabling the student to earn a part or all of his school expenses, the Berea program also aims at enhancing the dignity of labor, activating a sense of personal responsibility, and developing a spirit of cooperation in a worth-while enterprise.[6]

The work is in this manner put to educative use not only in the development of individual attitudes but also in the improvement of the mountain community as a whole. Berea's early leaders realized that the great majority of mankind

> . . . were not to earn their bread and serve their generation in the learned professions. *There must be a Christian education for those regiments and armies who were to be parents, neighbors, citizens, and to spend their days in field, shop and places of business.*[7]

Accordingly, the College is but one of five institutions at Berea, all intended for youth and adults over fifteen, but ranging from a foundation school (elementary) through a high school and college.

As a result of a missionary spirit, the institution conceived of vocational training as "simple imparting of such knowledge and skill as will promptly increase earning power and diminish poverty. . . . And this type of education should give more than increase of earning power—it should give joy and pride in agriculture and the mechanic arts." [8] "When a few students appeared who put on airs as not needing to work . . . , Berea made some hours of manual labor each week compulsory for all." [9] To provide this work, many jobs were found in the institution, chiefly maintenance and service activities. In addition a few industries were set up, chiefly a broom factory. Student teaching, home nursing, and the like were added to provide a minimum of ten hours' work for every student each week.

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[5] Berea College, *Bulletin: General Catalog, 1946–7*, Berea, Ky., The College, 1946, p. 9.

[6] *Ibid.*, p. 23.

[7] William G. Frost, *For the Mountains* (New York, Fleming H. Revell, 1937), p. 140.

[8] *Ibid.*, p. 213.

[9] *Ibid.*, p. 236.

This work is not correlated with the curriculum of the classroom; it is intended chiefly to help adults pay their way in a private school, to develop skills that may in the future be useful, and to build a respect for the dignity of labor itself.

3. Cooperative Work Programs

A pattern in occupational education now well established in American schools is cooperative work experience. In this type of training, school, employer, and student cooperate to develop values that none of them could accomplish alone. Part of the student's time is spent in classes, part on the job. Alternation procedures may call for dividing the day, the week, or cycles half a year in length, between school and job. The plans generally provide for general and related studies in classes, for rotation on jobs while at work, and for supervision of work experiences by the school, which normally makes the placements as well.

In the United States the system was introduced by Herman Schneider at Cincinnati's School of Engineering in 1906, the main objective being to drive principle and practice as a team abreast instead of in tandem.[10] The old system of filling engineering students with theory for four years and then throwing them into unguided employment had not facilitated learning in school or adjustment on the job. Theory might be learned best in school, but men and mechanisms had to be studied in their own purlieus. Thus, the cooperative plan of education was inaugurated, students alternating a few weeks on the job with as many weeks in school. Working in pairs, one student was in school while his "opposite number" held down the job to which the first student would return at the end of his school cycle.

With many variations, the system was to spread to a few score colleges and to hundreds of high schools throughout the country in the next forty years. Recently, cooperative work in retailing has come under the provisions of federal aid to education, following earlier programs in trade and industrial education. In most cases, these programs aim at preparing a student for a specific job, with general orientation to the world of work and general personality development as secondary objectives only. In the sense that these programs are specific job training alone, they do not come into the purview of this study. But to the extent that they are employed for general educational purposes they do.

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[10] Herman Schneider, *Thirty Years of Educational Pioneering* (Cincinnati, University of Cincinnati, 1935), p. 13.

A. ANTIOCH COLLEGE

Perhaps in no case is as much stress put on the general values of cooperative work-study as in the Antioch College program. As the student goes off to his cooperative job, the college is interested not only in the student's learning to work, get along with people, and develop vocational interests, but also in his developing an acquaintance with contemporary society.[11] The program is conceived as a wider application of the Cincinnati plan—not training alone, but acquaintance with the economic world and the men and women the learners work with.

In its emphasis on the contemporary scene, Antioch does not repudiate the objective of transmitting the common cultural heritage:

> By way of common ground, anything less than awareness of the broad general approaches to knowledge—science, art, religion, history—and the great human achievements in them seems inadequate. Antioch would add to this the common ground of shared experience in work, of the intimate knowledge of society today, and of trying to understand and operate a democratic community. . . . But to separate these kinds of education is impractical since intelligent citizens must live, and since the way they earn their living is one important channel through which their intelligence and general attitudes flow back into society.[12]

For it finds that cooperative education contributes widely to liberal education:

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[11] Algo D. Henderson and Dorothy Hall, *Antioch College: Its Design for Liberal Education* (New York, Harper and Brothers, 1946), p. viii.

[12] *Ibid.*, pp. 17–18.

Whereas the popular impression of the cooperative work-study plan of education is merely that it aids the student in choosing a vocation and in preparing for it, Antioch as a college of liberal arts and sciences thinks of the plan also as contributing to liberal education. When the student leaves the sheltered environment of the campus for his regular work assignments he is at least in a position to make direct observations about contemporary civilization. *If he receives some direction in this experience*, he may make distinctions between good ethics and bad not only in jobs but also in communities; he may see both tolerance and intolerance at work; he may appraise the effects of social planning or the lack of it; he may acquire a greater sensitivity to beauty through exposure to art and music; he may learn the difference between a creative individual and a passive one; he may become sensitive to human beings both as individuals and in the mass. With this kind of first-hand knowledge about society today, students are in a better position—Antioch feels—to comprehend the past and the various theories about human progress.[13]

To guide the integration by the student of these experiences, the College requires that over the four-year period two critical reports be made which deal with some observation or reflection of general interest arising out of a work period. A movie-studio messenger undertook an analysis of unionism in Hollywood; a Cleveland newspaper cub made a study of the Van Swearingens and city planning; an aspiring writer worked a tour in a forestry camp and came back with four short stories. Students are guided to look beyond pressing tasks of the moment and see the general picture of the world in which they find themselves.

Discussion of work experiences becomes an important part of the Antioch curriculum in the school cycle. A vital program has been built up around occupational experience combining firsthand contact with the student's chosen career and some additional field for broadening. It is seen as the basis for a democratic culture:

> Since in America we are less interested in *noblesse oblige* and more in the shared experience of a common task as the basis of our democratic society, to let the work experience die out as a formative cultural influence would seem to be unfortunate—particularly since, to realize our vision of what our society can be, there is no real lack of work to be done.[14]

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[13] *Ibid.*, p. 85.

[14] *Ibid.*, p. 121.

B. ROCHESTER INSTITUTE OF TECHNOLOGY

One of the interesting programs on the less-than-college level is that of the Rochester Institute of Technology (formerly the Rochester Athenaeum and Mechanics Institute).* Having selected a course, most students engage in the cooperative work program. In most cases two students work on a single job, alternating school and work in cycles ranging from four to ten weeks each. This work is remunerative (one girl's record, taken at random, showed a range from $432 for twenty-four weeks in the first year to $575 for twenty-three weeks in the third year) and supervised by the Institute. Care is taken to prevent exploitation of the student on a single routine task, and most firms involved employ schemes for orderly rotation of personnel through the various processes included in the enterprise. The students write a report at the end of the first work cycle, analyzing their activities, offering suggestions to those who may follow them on the same job, making recommendations for improvement of the cooperative program. The acquisition of scientific information while on the job is one of the recurrent themes in these reports; and some students express a wish for closer relationship between job and school during the work cycle.

The work experience is stressed chiefly as a tool for training in a given field, but use is made of work experience in the social sciences as resource material in studying psychology, economics, social problems, philosophy and art appreciation. Ever since the first world war these courses have reflected the influence of W. W. Charters (who has been an Institute curriculum consultant for the past quarter-century) and his interest in job and life-activity analyses as the basis for education. In much the same manner as the Institute's technical training has been guided by analyses of job constellations, the social studies department has been guided by analyses drawn from and extending the life-activity analyses of Stephens College alumnae. For the most part, the social studies group is regarded as a service section for the remainder of the school. No student may major in social studies, but each student takes at least one course each year in them. Social studies teachers are required to have business experience; they meet weekly with the technical department whose students they teach in order to ensure coordinated activity. A large part of the class time is taken in discussions that arise from problems encountered in the students' cooperative work experiences. In order further to break down the barrier between social studies and technical work, the term "occupational training" has been introduced as a combination of two "components" in education: the technical and the liberal. Basic is a strong belief in the educative value of training in the sustaining activities of life.[15]

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* Visited September 8, 1947.

The first-year social studies course, required of all students, is one called Human Relations, a kind of applied psychology which is focused on getting along with other people in school and on the job. The job, of course, offers a wealth of raw material, and this raw material becomes substance for the class. Generally speaking, the same approach is used in later courses in economics, industrial management, ethics, philosophy, social problems, and appreciation of the arts. The tendency is for social studies to be given greater attention in the Institute as one moves from the more technical occupations in the engineering fields to the more personal service occupations.

Serving to coordinate the work of the student in school and on the job are the interesting anecdotal behavior records kept for each student.[16] As the enrollment has risen in the post-war boom, teachers have found it progressively more difficult to enter these anecdotes, although secretaries and dictaphones are available to make the job easier. Anecdotes are furnished by teachers, by coordinators who supervise work in the field, and occasionally by employers who fill out, in addition, periodic rating scales. In some cases the "anecdote" is merely a generalized character estimate, but a good many relevant and pertinent incidents and observations are reported which furnish a rather specific view of the student. In addition, the student receives at the end of each block of work a rather lengthy letter giving a detailed review of his accomplishments.

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[15] See George W. Hoke, *Blazing New Trails* (Rochester, Rochester Athenaeum and Mechanics Institute, 1937), Chapter XII.

[16] *Ibid.*, Chapter XIV.

C. DISTRIBUTIVE COOPERATIVE PLANS

On the high school level a healthy result of the George–Barden Act has been the extension of cooperative work to the retail selling field. Because state laws do not prohibit the employment of minors in this area, and because beginning workers do not need too much skill and experience, retailing in times of high employment offers a rich opportunity for orientation to the world of work.

In Detroit * a retailing cooperative course has been set up for high school seniors. Rotation from department to department, in both selling and non-selling, is arranged for, and students are placed by the school. Store talks are given the student workers in the larger stores. School credit is allowed for the work experience, for a work orientation course, and for related school work such as Store Arithmetic and Store Speech. A course in retailing is offered to juniors but is not required for enrollment in the senior cooperative program. The work-orientation course includes discussion of opportunities in distributive trades, preparation of the student for employment, preparation for a job interview, and job training. Personality development, problems of the individual in adjusting to a job, labor problems, taxes and government regulation are other topics that are included in the related class. Students replying to a questionnaire checked these values as accruing from the program:

1. Meeting more people and getting along with them.
2. Developing self-confidence and self-control.
3. Experience in all types of store work.
4. Adaptation to a variety of placements.
5. Help in deciding one's life work.

They regarded cooperative work experience as superior to casual work because of (1) the variety of jobs the student encountered, (2) the greater interest of supervisors on the job, (3) school preparation for the job, (4) valuable supervision by school personnel, (5) increased significance of the job, and (6) directions given for improvement. About 20 per cent of the students felt that the job left them less free time for homework and social activities than they wanted.

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* Interviews with Detroit Public School personnel, September 11–12, 1947.

D. CHRYSLER COOPERATIVE PROGRAM

In addition to the retailing program, an extensive trade-and-industrial cooperative program is maintained. Five Detroit high schools, for example, place students for two-week cycles in the Chrysler Corporation's machine shops, commercial and commercial art departments. While at work the students are paid regular hourly rates with increases granted every six months. The students are eleventh and twelfth graders who have passed qualifying tests for ability, personality, and interest. "As a trainee," an information booklet tells the student worker, "you learn to operate machines in a typical industrial atmosphere. Then as you progress in ability, you advance from simple hand tools and machine operations to more complicated ones. Your work is checked by regular inspectors and marketed as products of the Corporation." Students design and construct jigs, fixtures, gauges as nearly as possible in the actual plant environment. Opportunities are present to find practical application of shop theory and mathematics. Tours of various departments of the Corporation are included. A full-time coordinator is employed by the company for placement and follow-up of students who remain in the company's employ. "The cooperative plan," says the booklet, "teaches among other things the importance and dignity of labor with hand and brain. . . . Work experience inevitably contributes much to initiative, resourcefulness and self-reliance." [17]

An interesting aspect of the program is the work done by commercial art students. Working in the company's school division, the students take part in the design, coloring, lettering, and production of learning aids, such as silent slide-films, charts, visual cast slides, book illustrations, catalogs, models, and materials for opaque projectors.

Most important criterion is the effect of the project upon the participating students. The practical aspect of the work appealed to them. Among their numerous contributions was a 90-frame colored slidefilm on machine shop safety.[18]

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[17] Chrysler Corporation, Department of Industrial Education, booklet on the Chrysler School (no title, no date, Detroit, Mich., The Corporation).

[18] John M. Amiss, "3-Way Visual Aids Program," *American Vocational Journal* (September 1946), XXI, 14-15.

Equally significant is the Chrysler program for vocational guidance personnel operated during the summer months. The program makes cooperative work meaningful to *teachers* by employing them in regular production jobs supplemented by eight hours of university instruction in cooperation with several local institutions. The teachers (and teacher-trainees in some cases) earn wages alongside fellow workers in an industrial world and credit toward degrees in the cooperating universities. An illuminating experience is reported by C. A. Hakenen in "A Field Agent Discovers Industry," as he remarks that the eight-week job is just an introduction but that it makes possible the job of interpreting industrial employment to students interested in such vocations.[19]

E. MINNEAPOLIS PROGRAM

In Minneapolis* the cooperative program is aimed at two levels: maladjusted junior high school students who will probably leave school at sixteen—the legal attendance minimum—and high school students who elect the work. Students may get special permits to work in the semester before they reach sixteen, and the junior program takes advantage of this opportunity to induct students who plan to leave school and enter the work world. In the case of these pupils who have been unable to adjust to the demands of the school, "the hope for them is that they may be made good workers on the level for which they are qualified, and that they see the dignity and contribution which their service gives at that level." It is evident that most of the boys who leave school at sixteen in Minneapolis will go into production-line machine work, but federal directives restrict machine-employment to the over-sixteen group. Accordingly, the main effort is put on stressing general values of work experience for the junior group rather than skill training. The schools have found it possible to explain this situation to the students and to place them in temporary jobs where good attitudes, work habits, and understanding of employer-employee relationships can be built. A report on the achievements of the program states:

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* Visited September 13–16, 1947.

[19] C. A. Hakenen, "A Field Agent Discovers Industry," *Journal of Rehabilitation* (June 1946).

> The program had very noticeably improved the attitude and behavior of all those students in the opinion of their classroom teachers, the coordinator, and the principal. It was the feeling of the coordinator and the principal that much of this improvement was the result of the feeling of success which these students were experiencing for the first time as a result of their job.[20]

In the morning the students take English, Occupational Relations, and an elective. In the afternoon they report to their job.

The program in the high schools, on the other hand, was not originally intended as a success experience for the maladjusted, but was started as an effort to control the employment situation of students. School credit is given for work experience, and correlated study through the occupational relations course is required. This course calls for a discussion of orientation of the student as a worker in the community, analysis of the particular job a student holds, measuring his potentialities as a worker, adjustment problems and personal problems of the beginning worker, problems common to all workers, community agencies available to workers, and long-term planning. An attempt is made to cover a comprehensive body of information traditionally neglected and of undoubted importance to every youth facing initial employment problems. Treated in terms of concurrent job experience, the course should hold great value.

Students reporting on their attitude toward the program mentioned these values as not obtainable in school alone: machine operation, recognition of the importance of good grooming, proper attitudes toward accuracy, and dependability. They thought that the occupational relations course had helped them in meeting people, in learning how to act on a job, in developing interviewing techniques to get a job, in budgeting time and money, in developing realism as regards promotion expectancies. Handled chiefly in the general high schools, the program aims more at personal development than at skill-training.

F. WORK EXPERIENCE REQUIRED

Probably the only high school in the country requiring cooperative work of all its students is the Central Needle Trades High

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[20] Minneapolis Public Schools, *Now They Work* (mimeographed, Minneapolis, The Schools, 1946), p. 3.

School in New York City.* The guidance director regards the purpose of the school as personality improvement, with better living as the goal and immediate contact with industry as a method. In the first half of the last year a course in occupational information is given by the personnel department, although the feeling prevails that such information should be handled by the shop teachers in their daily twenty-minute shop talk. Included are union problems, workmen's compensation, social security, and a number of techniques designed to focus interest on personality development. In the last half-year all students participate in a week-by-week alternation in New York City's needle trade industries: men's, women's and children's wear, hats, shoes, furs. The trade teachers supervise occupational experiences in the afternoons. Generally there is rotation of processes in any one job, but the student is required to persevere in a single job situation for the four-month period. Most students remain on the same job after graduation. There is no course designed to coordinate school and job experiences for the best cross-fertilization, although this may be done fortuitously in shop classes during the school week. While on the job the students are members of the appropriate union and have an opportunity to find out firsthand how unions operate.

G. DIVERSIFIED OCCUPATIONS PROGRAM

In small communities the cooperative program has enabled many schools to afford a realistic education for youngsters who cannot fit into the academic mold that the single-course high school usually provides. In the South, particularly, the Diversified Occupations Program since its introduction in 1933 has made it possible for youth to get experience in an industrial world that small schools could not otherwise offer.[21] Half the school day is released for work in local establishments on the basis of a written agreement, and in accordance with a carefully worked out schedule. The adolescent in his last two years acquires a modicum of vocational training, but more important, he is doing productive work in an adult world, he is exploring a vocational field, and he has the benefit of the guidance of the school coordinator as he draws his generalizations about this new, adult, industrial world. In addition, he is on the way toward solving the perplexing problem of employment upon graduation from school. Rakestraw reports that most cooperative students make themselves valuable enough to their employer so that he retains them after graduation without displacing regular employees.[22]

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* Visited November 20, 1947.

[21] See Clarence E. Rakestraw, *Training High School Youth for Employment* (Chicago, American Technical Society, 1947), for full discussion of Diversified Occupations Program.

In this program the coordinator is exceptionally important, as he is charged with making employment contacts, with spreading the program, and with supervising the work experiences of his students in order to make sure that education, not exploitation, is the motif. Often the coordinator will teach students in their morning hours spent in school. In the case of the diversified program, the school does not provide the trade instructors, but, for better or worse, uses the local tradesmen and artisans in this capacity. The morning program is left with the responsibility of drawing the most educational value possible from these trade experiences.[23]

Leo F. Smith in a doctoral dissertation on cooperative programs[24] makes the following analysis of the advantages and disadvantages of the program to student, educational institution, and cooperating business establishment. The student gains (1) a financial return in the immediate present and increasing earning power for the future, (2) a sense of responsibility, (3) occupational adjustment—a better understanding of his own interests and abilities and of employment opportunities, (4) motivation for schoolwork, (5) better ability to get along with fellow workers, (6) practical application of school theory. He may suffer, however, from lengthening of the school course, from confusion in shifting to and fro between job and school, from reduced social life, from forgetting academic work while on the job.

To the institution the program means capacity to accommodate more students with the same equipment, a mechanism for integrating school and community, a stimulus to keep abreast of the modern business world. On the liability side of the ledger lie administrative difficulties and the disruptive effect of ups and downs in the business cycle. To the cooperating firm, the program provides a source of operating personnel on the high school level and supervisory personnel on the college level, and a testing ground so that the cooperator can select the most promising employees for permanent employment. In some cases employers have objected to a higher cost of training employees, to a lack of continuity as the students alternate between work and school, to problems that arise because of occasional unfriendly attitudes on the part of other workers.

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[22] C. E. Rakestraw, "Cooperative Part-Time Diversified Occupations Program," *Occupations* (March 1940), XVIII, 406.

[23] Rather complete descriptions of state programs are available in publications of Florida, North Carolina, and Alabama State Education Departments.

[24] Leo F. Smith, *Cooperative Work Programs in Higher Education Institutions in the United States*, Doctoral Dissertation, University of Chicago, microfilm, 1946, pp. 118–26.

To the advantages, Ell, after twenty-five years' experience with the program at Northeastern University, adds the increased maturity of the student as he learns to get along with people, to work with materials, and to respect human labor; a decreased turnover of personnel in industry; and, for society, increased educational opportunity for more youth, constructive use of the students' abilities and energies, and more stable citizens.

> Boys develop into men coming to sense the opportunities that lie hidden behind the monotony of daily routine in the store, the office or the factory. Employers come increasingly to realize the potentialities concealed beneath the carefree and undisciplined approach of youth to its first job.[25]

4. Non-Cooperative Work Experience

Three values in the educational employment of job experiences have been emphasized: first, broadening the student's outlook on the needs and demands of the workaday world; second, providing practical application of concepts learned in school; third, enabling the student to earn part of the cost of education.[26] The third value is foremost at Berea and will be re-examined in the discussion of the National Youth Administration; the second is found in cooperative education; the first motivates the program at Antioch and also the high school work experience programs which have been receiving growing attention since inauguration of the NYA more than a decade ago. Two basic considerations underlie the program: one, fostering part-time work for youth as an essential part of general education; the other, attempting to control or direct job experiences which youth obtain apart from the school's efforts. Work experiences as discussed in this section differ from the cooperative program in the relatively smaller control by the school of the work performed, in the tendency for this type of work to be unrelated to the school curriculum and to be performed outside of school hours, in the usual absence of a direct connection between the nature of the job and the career objectives of the student. Generally, cooperative jobs are to a large extent intended as specific and direct vocational preparation; the educational purposes of the work experience program are usually general in nature—exploration, development of desirable work habits and attitudes, understanding of the occupational scene, an insight into industrial organization. Ordinarily, the student's chief motive is the remuneration involved and the sense of emancipation that derives from participation in the adult world.

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[25] Carl S. Ell, "The Social Significance of the Co-operative Plan," *School and Society* (April 6, 1935), XLI, 452–53 and 451.

[26] Smith, *op. cit.*, pp. 31–32.

Basic in the establishment of the work experience program as auxiliary to the normal school activities is the realization of a change in our economic life that makes necessary the provision of work experiences while the youth is still in school. A former NYA official writes:

> Work is a vital part of life, and the work experiences which are engaged in by young people during their period of transition to adulthood are an essential part of their mental, emotional and even physical development.[27]

Because that work is not provided at present, he sees the majority of adolescents "totally out of touch with reality in their mental and emotional attitudes toward the world." [28]

A. PROVIDING OPPORTUNITIES TO WORK

To meet this problem, it has been proposed that opportunities for work be provided. These should involve performing specific jobs and should require in their performance (1) the development of proficiency, (2) experience in actual work conditions, (3) learning how to work, (4) the inculcation of desirable habits, and (5) actual production of goods.[29] But since the function of the school is not solely that of training good workers, the problem is to make such work a function of the total educative process. An awareness of social and economic problems, a basis in a "true idea of work," and contribution toward building a better community are desired.[30]

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[27] George C. Mann, "Work Experiences in Schools," *Phi Delta Kappan* (May 1941), XXIII, 321.

[28] *Ibid.*

Numerous kinds of work experience opportunities have been obtained for adolescents. They range from the diversified occupations described in the preceding section to casual after-school jobs whose only relation to the school lies in placement policy. In some, time is released from the school program; in others it is not. High school credit toward graduation is not universal, and use of such credit toward college entrance is rare. In almost all cases pay for time worked is involved, although this is generally not the rule where the work is performed on community projects or in service to the school. In Fryeburg, Maine, the school leases a farm; the Grant's Pass School in Oregon maintains a forestry project; Springfield, Vermont, has a cooperative machine shop; Aberdeen, South Dakota, releases students for half the school day for work in an occupation of their own choosing; Albuquerque, New Mexico, and Floral Park, New York, train students and place them in retail shops as "extras" in the Christmas rush.

An interesting effort to use non-controlled work experience to educational advantage is made at the Wells Senior High School in Chicago.* In the improved business conditions following the second world war, approximately 70 per cent of the students are estimated to be working at remunerated employment, and an additional 15 per cent are employed in small family enterprises (stores, small factories, non-domestic work done at home) without regular pay. In the ninth grade one of the core areas centers about work, with English, social studies, science, and health education classes focusing on vocational interests. This core was set up during the depression when a very large percentage of students were leaving school at sixteen, the state-mandated minimum attendance age. Again in the twelfth year, since the large majority of Wells graduates seek employment directly after graduation, a core on employment is conducted. Of particular interest are the school's annual survey of employment of its students, the reporting by each student of the job he holds, and the filing of this report by the student's science teacher, who credits his work experience toward his science grade. A related survey made by the twelfth grade core in 1946–47 was an investigation into the nature and operation of trade unions in occupations in which the students worked.

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* Visited September 22, 1947.

[29] F. P. Haskyn, "Idea of Work Experience," National Association of Secondary-School Principals, *Bulletin* No. 111 (January 1943), pp. 16–21.

[30] *Ibid.*

Another example of an effort to direct after-school work experience is found at the Evanston Township High School.* Approximately 15 to 20 per cent of the senior class is engaged in the program. Contacts are made with employers by the school coordinator, and an effort is made to select jobs which will have more than general value alone for the students. However, the director feels that sometimes more is gained from some incidental job than one related to the student's career choice. The program states four aims: personal development; pleasure, profit, and progress that may come through job understanding; academic credit toward graduation, but not toward college entrance; personality development. Learning about the inside mechanism of a store or factory is seen as one of the chief advantages. For the most part the students are non-college aspirants, although an effort is being made to enlist more of the students who will go on to college. The program involves a minimum of ten and a maximum of twenty hours per week on the job without a reduced school program. Correlative with the job experience is attendance of a Job Experience class, where major stress is on development of work attitudes and habits as related to experience at work. Opportunity is provided here for exchange of experiences and problems.

B. GENERAL EDUCATION, NOT JOB TRAINING

In short, the aims of work experience lie in the realm of general education rather than in specific job training. Aims include discovery of abilities of the individual and of employment opportunities, development of desirable habits and disciplines, understanding of relations of social and industrial organization to employment, and the relation of consumer income, capital investment, government regulation, and production to each other.[31]

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* Visited September 19, 1947.

The program has the blessing of the National Child Labor Committee, as it opens "the door of opportunity and gives the boy and girl the incentive of proving their mettle in the crucible test of producing results of recognized value in the world of men," in contrast to child labor, which is characterized by occupational blind alleys. However, Courtenay Dinwiddie, general secretary of the Committee, warns that work experience must teach group cooperativeness, altruism, and planning for the common good, or "it is steering the youngster directly toward the exclusively materialistic aspect of success without regard to the good of others." [32] To the extent that work activities become part of school discussion, positive values may be developed.

Criticism of the program stems from several sources. Jacobson endorses it in general but is critical of the failure to extend the program to any considerable proportion of the students in schools where the program operates, and of the lack of relationship to the school curriculum.[33] Haskyn points out that the school cannot *give* work experiences; the student has to make all the experience, has to link together the details to form his own ideas and abstractions.[34] In view of this, Christensen concludes that in order to achieve educational values the school must aid student workers to generalize with reference to their work experience.[35] For those seeking vocational efficiency primarily, Haskyn warns that adjustment to the work world is chiefly a matter of understanding it, of possessing "true ideas of the world," and that these ideas will probably not make better workers. They will, however, be the basis for obtaining any meaning from work activities; and that is the goal of occupational education as set forth in this volume.

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[31] Walter D. Cocking, "A Program for Work Experience," National Association of Secondary-School Principals, *Bulletin* No. 111 (January 1943), pp. 27–28.

[32] Courtenay Dinwiddie, "The Kind and Quality of Work Experience," National Association of Secondary School Principals, *Bulletin* No. 111 (January 1943), pp. 32–33.

[33] J. Paul Leonard, "Nature of Work Experience," National Association of Secondary-School Principals, *Bulletin* No. 111 (January 1943), pp. 3–12.

[34] F. P. Haskyn, "Work Experience: Basic Issues," *Curriculum Journal* (January 1943), XIV, 25.

[35] T. E. Christensen, "Work Experience and Transfer of Training," *School Review* (December 1945), LIII, 588–94.

5. Work Camps for Youth

A. VOLUNTARY SERVICE CAMPS

In the Twenties the International Voluntary Service Camps described in Chapter VI had drawn many Americans into their activities in Europe and Asia, and those who had participated brought back with them enthusiastic accounts of their work. A result was the establishment by the American Friends Service Committee of one camp in 1934 and five more in the next four years, a total of twelve in 1940. One, in the coal-mining region near Uniontown, Pennsylvania, assisted in rehabilitating families that had been made destitute by the abandonment of mines in the area. These families were being resettled in an agricultural cooperative. A second assisted the Tennessee Valley Authority in building a fish-hatchery in the Tennessee Valley; a third helped city authorities in Flint, Michigan, build a park; a fourth developed recreational facilities for underprivileged youth in an industrial area near San Pedro Harbor in Los Angeles.

While the camps assisted materially in rehabilitating areas and populations, in camps like the Pennsylvania project mentioned, students from diverse backgrounds were able to participate in the life and work of the project and at the same time study, for example, the problems of the soft-coal industry by discussing problems of that area with the people themselves. In Flint they could find out about the operation of race prejudices and interracial relations and the effects of living in a one-industry town. At TVA sites they could see community planning at work.

In 1940 Kenneth Holland made a study for the American Youth Commission of camps for high school youth and college students run by the American Friends. The camps ran for eight weeks each, during the summer vacation, and combined work with opportunities for social service. Two of the high school camps were operated in conjunction with camps run by settlement houses in New York City. All but two of the fifty-eight campers came from professional homes. Although the average age was sixteen, fifty of the campers had never done any manual work. The camp provided opportunity for exploration in a variety of occupations: farming, carpentry, plastering, painting, masonry, and the preparation and serving of food as the student workers helped satisfy crying needs for playground facilities, recreational buildings, and athletic fields for the children who were using the settlements' camps. A result, says Holland, was that "participants seemed to have attained a new feeling of adequacy and of social worth as they worked to improve the plight of others less fortunate than themselves."[36] Further, it was felt that values accrued in living and working together in a group, in the growth of group consciousness, cooperative effort, and the group will to accomplish something worth while.

Sufficiently near industrial areas, the camps made possible a variety of field trips to study social conditions and occupational life. Visits to a quarry, a silk-stocking factory, a Civilian Conservation Corps camp, an agricultural experiment station, a cooperative community, an iron foundry, a migratory workers' camp, mines, a dye plant, and a laundry were included in a single camp's program. "It is important," Holland notes, "to learn not only how work should be done, but how it is or is not done in our country."[37]

In each case the campers had elected an educational and planning committee which arranged evening discussions. Lectures, visits to plants, homes, and housing projects, and informal observation of people in the area served to enrich meanings as campers took part in programs of community service.

Students evaluating their summer experience found these values: a broader outlook on life in general, a development of ideals of social service, personal benefits growing out of group life, a greater realism in conceptions of social problems, increasing knowledge in particular fields of interest, an understanding of cooperative systems, satisfying religious experience, and enlightening work experience. From the work experience they reported a respect for manual labor, a new confidence in themselves, and an increased ability to get along with others and follow directions.

Since the close of World War II, the Society of Friends has sponsored week-end work camps in Philadelphia and Seattle. Teenagers help underprivileged city-dwellers refurbish their homes.

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[36] Kenneth Holland and George L. Bickel, *Work Camps for High School Youth* (Washington, D. C., American Council on Education, 1941), p. 16. Also see Holland, *Work Camps for College Students* (American Council, 1941).

[37] Holland and Bickel, *op. cit.*, p. 11.

B. SCHOOL CAMPS

A second type of camp whose chief purpose is education is the new camping program sponsored by various local school systems. The camps provide opportunity for realistic work free of the dangers of exploitation that lie in commercial enterprises. Work consists of maintaining the camps, building better camping facilities for other campers who follow, and various conservation projects.

In Michigan a state law authorizes school districts to purchase camp sites for use by their students in the camping program. This purchase has not been necessary in most cases because cities and towns have been able to use state-owned camping land, camp sites owned by universities, and privately owned land. The camping takes various forms—day camping for elementary school pupils, a two-week camping cycle running through the school year for fifth graders in Battle Creek, travel camps and excursions, clubs and special activities, field trips, and training for junior tourist guides. The program is not viewed as something separate from, but as an extension of, class activities, and it stresses five major functions: group living, learning the science of growing things, health, recreation, and long-time skills for future conservationists, timbermen, and guides. The focus is on social values—living together—rather than on occupational aims, but work forms a good part of the day, and the values of work experience are emphasized. Work is of two kinds: camp services, and improvement of property, including conservation and game management.

Inevitably accompanying the work is increased knowledge of the natural environment and of use of tools of all kinds. Lloyd B. Sharp, director of National Life Camps, sees in the camps a splendid opportunity for young people to live, work and explore together.[38] Scientific thinking, citizenship, individual and community initiative and responsibility, tolerance, courtesy, the appreciation of natural resources and natural beauties are values claimed for the camps. These values involve an introduction to the joy of work and a foundation for lifelong health as well.[39]

Results of the Battle Creek camping experience for fifth and sixth graders have included the readier acceptance of responsibility, improved food habits, the ability to get along with others, and practical experiences in communication (through letter writing and diary-keeping) and in arithmetic (through transactions in the camp store and bank).[40] In the camp, lessons that can be learned only from experience are gained in areas such as production and proper use of food, the problems of providing and maintaining shelter, the making and proper use of clothes, living with others, and recreational pursuits.[41]

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[38] L. B. Sharp, "Camping and Outdoor Education," National Education Association *Journal* (May 1947), XXXVI, 366–68.

[39] Amy Porter, "Open-Air Scholars," *Collier's* (March 1, 1947), p. 23.

In Michigan, eleven high school camps were conducted in 1949 and fifty in 1950 as a project in outdoor education which coupled experiences of the older youth group in living and working together. Development of natural resources was the theme of the camps, and an effort was made to provide realistic work experiences for youth in conservation. Since 1949, the Kellogg Foundation which helped finance the Michigan camps has extended this type of aid to other states. A pilot program in outdoor education to combine the values of social adjustment, work experience and conservation education was conducted in 1950 in the state of Washington.

6. The Civilian Conservation Corps

In the depression no group had been harder hit by unemployment than adolescents 16 to 24 years of age. Charles W. Taussig, chairman of the National Youth Administration's National Advisory Committee, wrote that the "Youth Problem" had been created by (1) not enough jobs for youth, (2) an educational system inadequate in size or character to prepare for jobs that were available, (3) inequality of educational opportunity, and (4) a gap measured in years between youth's leaving school and getting their first jobs.[42] The New Deal made an approach toward solution of this problem through the creation in 1933 of the Civilian Conservation Corps, and in 1935, of the National Youth Administration as inadequacies of the Civilian Conservation Corps became apparent. Aid to students had begun in 1934 and was transferred to the National Youth Administration upon its organization a year later.

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[40] "St. Mary's Lake Camp" (Calhoun County, Mich., mimeographed, no date)

[41] E. de A. Partridge, "Outdoor and Camping Education for American Youth" (mimeographed, New York, National Life Camps, Inc., no date), p. 1.

[42] Betty and Ernest K. Lindley, *A New Deal for Youth* (New York, Viking Press, 1938), Foreword.

Since "for the public jobs were the sole objective," the chief function of the Civilian Conservation Corps was employment of youth. In proposing a conservation corps, President Roosevelt recommended work

> . . . of definite, practical value, not only through the prevention of great financial loss, but also as a means of creating future national wealth. . . . More important, however, than material gains, will be the moral and spiritual value of such work. . . . We can take a vast army of the unemployed out into healthful surroundings. We can eliminate to some extent at least the threat that enforced idleness brings to spiritual and moral stability.[43]

Following appropriate legislation, the Civilian Conservation Corps was set up under a three-way control. The Army had the responsibility of administration and maintenance; the Department of the Interior directed work activities in restoring forests, conserving soil, building recreation areas; the Office of Education appointed educational advisors to run after-work classes.

At the height of the program more than half-a-million young men were enrolled in the Corps at one time. The typical enrollee was nineteen years old, had completed 8.75 school grades in eleven years of attendance, came from a family on relief in two cases out of three. The average enrollee had been jobless for seven months before entering the Corps. He allotted $15 of his monthly $30 pay to his dependents, spent an average of one year in the "C's." Sixty-eight per cent of the boys came from farms, 28 per cent from towns and small cities, 16 per cent from large cities.[44] It was felt that the majority had been ill equipped in education and experience, and discouraged by rebuffs and failures in the past.[45]

"Most of these kids," said a vocational teacher in Maryland with broad practical training, "have a 'now don't try to get *me* interested in anything' sort of attitude. Also, a rule is something to be broken. You have to pull them out of these attitudes before you can get results."[46]

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[43] Kenneth Holland and Frank E. Hill, *Youth in the CCC* (Washington, D. C., American Council on Education, 1942), pp. 9, 10, 12–13.

[44] Average figures taken from Holland and Hill, *op. cit.*, pp. 58–70, and from Civilian Conservation Corps, *The CCC at Work* (Washington, D. C., Government Printing Office, 1941), p. 7.

[45] Holland and Hill, *op. cit.*, p. 49.

Among 178 boys interviewed, the following purposes came to light as motivating enrollment in the Corps: to be able to get a job on leaving (61 per cent), to learn a trade (57 per cent), to have some money (57 per cent), to learn how to work (32 per cent), to get a better general education (29 per cent), to see new parts of the country (19 per cent), to have good times (7 per cent), to have exciting adventures (2 per cent).[47]

Although the primary purpose on establishment had been jobs and relief, it became apparent to officials of the Corps that the needs of their youth employees could not be met by relief employment alone. Few of these youth had previously had either vocational training or experience on jobs involving any appreciable mastery of skills. Many who had not finished elementary school needed to be taught the three R's. Most of them needed the guidance of competent adult counselors. As these and other educational needs were recognized, the Civilian Conservation Corps moved to meet them by means of educational activities.[48] When the Corps was set up as a separate agency in 1937, the act gave statutory recognition to the educational function of the Civilian Conservation Corps and provided that at least ten hours each week might be allowed for general education and vocational training.[49] In 1939 the director's annual report announced, "The Civilian Conservation Corps as a monetary relief and job-giving agency has been replaced by the Civilian Conservation Corps as a work-training agency."[50]

Unfortunately the educational feature was always something "tacked on" to the main program of the Corps; educational personnel served merely as "advisers" to the military and forestry personnel running the camps and directing the work; classes were provided on a voluntary basis in leisure time. Dorothy Canfield Fisher was frankly skeptical about the Civilian Conservation Corps' educational program:

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[46] *Ibid.*, p. 126. [47] *Ibid.*, Table 17, p. 124.

[48] National Education Association and American Association of School Administrators, *The Civilian Conservation Corps, National Youth Administration and the Public Schools* (Washington, D. C., National Education Association, 1941).

[49] 75th Congress, 1st Session (50 Stat 319), Pub. No. 163, approved June 29, 1937.

[50] Quoted in Kenneth Holland and Frank E. Hill, *Youth in the CCC* (Washington, D.C., American Council on Education, 1942), p. 49.

> You can just guess again if you think that hearty young males, after eight hours of open-air work, three solid meals, plenty of horse-shoe pitching, baseball playing, and other athletic exercises, are going to volunteer in any large number to spend the evening in study. They did not. Or that they will learn much of anything if they do volunteer. This they did not, either. Under the three-cornered administration, the "educational advisors" could not and did not accomplish much educating.[51]

The "C's" were criticized too, for failure to stimulate the natural idealism of youth, for limiting their program almost entirely to pre-industrial manual skills; for the effects of political and military control and administration; for the failure to analyze possibilities for work instruction and to organize adequately for it; for failure to give enrollees an overview of the job they were doing and of occupational life in general.[52] Yet the regulations of the CCC had set up these aims:

> To develop power of self-expression, self-entertainment, self-cultivation.
> To develop pride and satisfaction in cooperative endeavor.
> To develop understanding of prevailing social and economic conditions as a basis for intelligent action.
> To preserve and strengthen habits of health and mental development.
> To assist each man to meet employment problems when he leaves camp.
> To develop appreciation of nature and country life.[53]

The aims were notable, their achievement often not very real. Yet, whatever the inadequacies of the formal education program of the CCC, work in itself proved valuable. Holland reminds us:

> Let us remember that the CCC has been millions of American youth pouring into these camps with doubt and often desperate hope, often discouraged and wondering about the future. Let us remember that millions have streamed back from the camps browned and stalwart and vigorous, with renewed courage, with better routines of living, with work skills they had not possessed, and with ambitions born in the camps.[54]

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[51] Dorothy C. Fisher, *Our Young Folks* (New York, Harcourt, Brace, 1943), p. 122.

[52] *Ibid.*, pp. 120–30, and Holland and Hill, *op. cit.*, p. 253.

[53] Adapted from Regulations quoted in Holland and Hill, *op. cit.*, pp. 164–65.

[54] *Ibid.*, pp. 258–59.

7. The National Youth Administration

The CCC had been a definitely limited program for several reasons. First, no provision had been made for girls. Second, the cost of the program was far in excess of any previous expenditure on youth.[55] Third, the program involved living away from home which was undesirable in some cases. Fourth, the program did not make any provision for youth who wished to continue their training. Fifth, improvement in employability was largely limited to general attitudes rather than specific training; moreover, much of the work performed was outside the main stream of modern industrial production.

In 1935, the NYA was set up as a branch of the Works Progress Administration. It included three main programs: aid to students in high schools and colleges, work projects for out-of-school youth in their own communities, and resident centers where out-of-school youth might combine work and education. The in-school program provided for the largest number of youth and was the most significant aspect of the NYA as affects the secondary school. Federal funds had made possible the first large-scale experiment in providing work experience for students who were attending school; as such it combined the values of extending education to the economically less fortunate and of providing work that might be guided into educative channels by the school. Work, which had long been neglected as a function of the school, had at last "crashed" the ivied gates.

Unfortunately, administration of the entire program was separate from the local and state school organization. A dangerous precedent was set for removing control of part of the educational program from the local community, a basic principle of American education. As a result, many things were done which were not educationally justifiable. Political control occasionally aborted educational objectives. The introduction of work experience into school programs, however, represented a notable achievement, and the results of the better ventures are described here.

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[55] Some $1200 per enrollee was the annual cost. In return, it should be noted, the value of the conservation work performed was estimated at over half of the cost; moreover, for the only time in American history the timber reserves of the country increased.

A. PLANNING REAL JOB EXPERIENCES

Funds being supplied, the most important problem was setting up work opportunities which would be real, which would add to employability of youth by giving them experience in work routines, which would be of genuine benefit to the community, which would produce something of real worth in goods or services, and which would not compete with private production or employment at a time of great economic stress. In the high schools most of the work performed involved maintenance and repair of school buildings and grounds (29 per cent), clerical assistance (library 13 per cent, departmental 15 per cent), service projects (22 per cent), semi-professional (6 per cent), and cafeteria and other "home economics" assistance (8 per cent). Construction of furniture for schools was one popular service project. In the colleges 21 per cent engaged in research, survey and statistics; 21 per cent in community service; 17 per cent in ground and building maintenance; 9 per cent in departmental activities, and 8 per cent in library work.[56]

NYA aid to students began in the colleges in the fall of 1934 and in the high schools in 1935, reaching a maximum of 150,000 college students and almost 300,000 high school youth in 1936–37. The average high school wage was around $5 a month. The Lindleys regarded this aid as keeping in school many of those whose contemporaries had "dropped out of school only because they lacked a few dollars a year for shoes, clothes, books, street car fare, and necessary incidental expenses. Supplying these few dollars obviously was the least expensive, and possibly the most useful way of taking some of these young people off the labor market." [57] More significant than money are the values of working for pay.

B. JUNIOR WORK PROJECTS

A second type of NYA program was that operated for out-of-school, out-of-work youth. For them junior work projects were initiated that made use of youth in constructing buildings, in producing goods in workshops, in public services and in nursery schools, making lunches, acting as hospital and health aides, acting as recreational assistants, participating in conservation programs and agricultural demonstrations, working in home economics. In many places, these projects resulted in the emergence of community youth centers.

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[56] "Youth and Work Opportunities," National Association of Secondary-School Principals, *Bulletin* No. 90 (April 1940), p. 46.

[57] Betty and Ernest K. Lindley, *A New Deal for Youth* (New York, Viking Press, 1938), p. 195.

The projects were designed to give youth a chance to earn some money, but they aimed in addition at giving the workers an opportunity to try out in various types of jobs and at developing work attitudes that would make them desirable employees if private placements could be secured. There was no effort to train highly skilled workers; orientation and exploration was the keynote.[58]

C. RESIDENT CENTERS

The third type of NYA program was the resident center approach. Here was an effort to reach rural youth who did not live near enough large population centers to take part in the second type of program. The CCC had met the needs of many rural boys (who made up more than a proportionate part of the Corps), but prior to the resident center inauguration no provision had been made for country girls. In many cases the resident centers were allied with state universities, making use of the university facilities and in the course of their activities enriching and expanding them. Most observers viewed these centers as the most significant part of the relief-education program.

Mrs. Fisher regarded these centers as "almost mathematically in direct contrast to the CCC." Living quarters were frequently built by the students, not by hired labor which objected to competition. There was variety in the experiences, and the variety was congruent to the make-up of modern industry. Four hours of scheduled study under trained teachers ("always subjects which are closely related to work they have done that very day") contrasted with the hit-or-miss class procedures of the CCC. Some of the resident centers included both boys and girls in their program. Married teachers and supervisors ate at the same table with the boys and girls, lived under the same roof with them, made homes in rooms like those used by the student workers. This was in contrast to the separation of officer and enlisted man which the "C's" had copied from the Army. And married supervisors who welcomed the students into their homes often gave these boys and girls what was their first glimpse of normal, ordinary family life.[59]

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[58] Lewis L. Lorwin, *Youth Work Programs, Problems and Policies* (Washington, D. C., American Council on Education, 1941), pp. 82–83.

The program in the resident center included the important problems of learning to live together, self-maintenance, and occupational activities suited to the region in which the center was located. In Louisiana boys learned to be all-round farmers, rotating tasks in horticulture, dairy, swine husbandry, farm shops, auto mechanics, cabinet-making, etc. In another center in the same state, girls alternated in two-week blocks between their homes and the center, learning to become better housekeepers and applying at home what they had learned about diets, cleanliness and general household management. At Passamaquoddy, Maine, boys enrolled in a "vocational finding school," spending their five months in trying out three different occupations and maintaining the village properties left behind when the government had ended its efforts to harness the tides there. In Colorado girls were trained as housekeepers; in Connecticut a laboratory unit and field work were organized for control of insect pests. In Georgia a 365-acre farm was operated by youth to take care of their own food needs. In New Mexico furniture for the high school, gymnasium and agricultural building was produced to match the style of a new high school building.[60]

Starting as a work program, the NYA, like other work programs, claimed that it was providing education through its work. In addition it attempted to provide more formal training related to, but apart from, the work performed. Youth mired between school and self-support needed something more than relief. They needed activity, preferably regular work, and some sense of being wanted. Work and a wage meant self-respect and self-confidence. The majority of youth were critical of the "tendency on the part of the professional classes to try to universalize their own acceptance of the prolongation of the process of full entry into active economic and social life." Might not, asked Lorwin, "the prolongation of youth" be carried too far? [61]

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[59] Fisher, *op. cit.*, pp. 133–37.

[60] Centers described in Lindley and Lindley, *op. cit.*, Chap. V; in National Association of Secondary-School Principals, *Bulletin* No. 99 (May 1941), Chapters IV and V; in Fisher, *op. cit.*, Chapter X; and in U. S. Office of Education, *Bulletin* 1946, No. 12, "Programs of Education and Training for Young Persons Employed on Work Projects of the NYA, Final Report."

D. OBJECTION TO "PROLONGED INFANCY"

Time and again NYA workers came face to face with youth's objections to this prolonged infancy. Most often it was found in negative attitudes toward school. The NYA found it difficult to interest youth in workshops located in school buildings—and comparatively easy to interest them in workshops anywhere else.

"Would you go back to school if you could?" we asked a number of out-of-school youth.
"Not regular school," was a frequent reply.
We wanted to know why.
"It's like prison."
"They treat you like babies."
"I got to make myself a living. I want to be an auto mechanic. What's French got to do with that?"
"I don't know. It's just dead." [62]

They frequently looked on teachers as warders. Schools seem to have failed to "sell themselves" to their customers, the pupils. Yet most of these same youth welcome learning when working on a building, in a carpentry shop, in a homemaking unit.[63]

Against this background of "flight from the school" lies the criticism of the National Education Association as regards federal intervention in education and the institution of a "dual" system of education.[64] French remarks:

> So far, however, too many of these work programs have almost wholly grown up alongside but outside the schools' education program. . . . The best we know in the philosophy of democratic education and in the psychology and physiology of learning argues for a synthesis of experience that makes all purposeful work a source of education.[65]

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[61] Lorwin, *op. cit.*, p. 22.

[62] Betty and Ernest K. Lindley, *A New Deal for Youth* (New York, Viking Press, 1938), p. 196. [63] *Ibid.*, p. 197.

[64] See National Education Association, *CCC, NYA and the Public Schools, loc. cit.*, whose main point is elimination of the NYA and CCC.

[65] National Association of Secondary-School Principals, *Bulletin* No. 99, p. 26.

The federal incursion into education was accompanied at times by subversion of basic educational values and by political abuses when the program could not be controlled by the responsible educational agencies in the local community. It is hoped that this dual system will not be restored. The NYA and CCC, however, were of value in pioneering certain types of work experience for youth. It is suggested that the public schools recognize these values and incorporate their desirable features into the regular public school program under authority of the local school district.

8. Work for Community Improvement

An interesting type of program that makes realistic work experiences possible is found in various efforts that have been made to tie the school curriculum to community improvement. In an economic system where control by the school of work experience in industry is difficult, the importance of such experience in controllable community projects grows. In this case, not only is it possible to control the working situation for educative ends, but it is also feasible at the same time to foster in youth a community conscience which production-for-profit enterprises may completely ignore and sometimes deride. For that reason it is worth while to give attention to such community programs as are in effect at present.

A. THE CITIZENSHIP EDUCATION STUDY IN DETROIT

One very interesting effort being made in this field is the Citizenship Education Study in Detroit sponsored by the city's public schools and Wayne University.* Working with a number of intermediate (junior high) and high schools, the Study's staff is attempting to move the schools in the direction of direct civic experience both in and outside the school and toward greater interaction between school and community. It seeks to build democratic attitudes through a more democratic atmosphere and relations within each school, through pupil participation in planning school activities, through emphasis on emotional as well as intellectual appeals of democracy. One school reports on service for the general welfare which is pertinent to the present discussion:

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* Interview with the Director, Stanley Dimond, September 11, 1947.

> Services such as safety patrols, hall guards, lunchroom assistants, library staff, lost and found assistants and others, offer invaluable opportunities for understanding group interdependence and for the rendering of mutual service—two concepts basically essential in a democratic society.[66]

The transition has required the gradual reorientation of teachers:

> In some instances teachers saw such services only as a means for improving the immediate situation in the school and in relieving them of certain routine duties rather than as a learning experience for all pupils. . . . They came to see, however, that membership in such organizations gives pupils a real learning situation and for that reason accepted the idea that opportunities for such experience should be widespread and that the entire situation needed study and improvement.[67]

Of especial interest is a project that has been going on for ten years in another school, the Jefferson Intermediate. Each year the children undertake a survey of the local community and then move into action for which the survey indicates need. Cleaning up neighboring alleys and improving recreational facilities in the school neighborhood are two of the enterprises Jefferson has embarked upon in the past.

In general, however, the Study has discovered a "quiet, firm, silent resistance" to efforts to move the school into community activity. The problem of stimulating other schools toward programs undertaken by a few innovators remains a difficult one. The question why activities like the Jefferson survey and follow-up have not spread despite ten successful years awaits an answer.

B. THE WELLS CIVIC ASSOCIATION

One of the common types of service activity is the traditional service club or league in a high school. Generally such organizations are highly selective and carry a kind of snob appeal. As such they draw the distaste of non-members for what is regarded as a "teacher's pet" organization. The Wells High School in Chicago* has developed a better attitude toward this type of service by requiring each student to enroll in some service activity every year. Most of the underclassmen serve as "corridor marshals" in one of their free periods: they supervise movement in the corridors, check for proper closing of the students' lockers which line the hallways, help keep the corridors clean through their own activity and through reminders to offenders. Membership on athletic teams and periodical staffs, messenger service, attendance clerking, participation in the Wells Civic Association (student council), assistance to teachers and to the administration, supervision of the student lunchroom—these are some of the more specialized types of service. Recognizing such service as a worthy part of the curriculum, the school gives credit for its performance in evaluating social studies work.

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* Visited September 22, 1947.

[66] Cleveland Intermediate School, *Survey of Year 1946–47* (mimeographed, Detroit Public Schools, 1947), p. 3.

[67] *Ibid.*, p. 87.

In addition to this service within the school, Wells is concerned with student participation in the activities of the numerous settlement houses which are located in the school area (and this includes practically all of Chicago's settlements). Here again provision is made by the social studies teacher for discussion of settlement house activities and for crediting them toward the social studies grade. The school itself serves to bind the community closer together with its annual Christmas party and Easter play for elementary school children. In the wider sphere of community activity, one or two projects a year are carried on which serve to aid the community at large as well as to orient students to civic activities of the adult world. Two examples are the activities of the social studies classes at election time (spreading election materials more widely and investigating election procedures) and the survey of labor unions referred to previously.[68]

C. HOLTVILLE

The Story of Holtville tells of the participation of an Alabama high school in the Southern Association Study. The experimental program in the years from 1938 to 1943 transformed a traditional program to one centered about service to the school, home, and community. Through this service, and through use of the usual subjects as "tools" rather than ends, the faculty discovered that students learned more quickly and did more and better work. As part of the school curriculum, boys and girls redecorated the reception room, first making plans for rearranging it and then working on curtains, furnishings, plaster, paint, and floors. A barber shop, beauty parlor, and bowling alley came into the school via the same route. As part of their home economics studies girls kept the school shipshape. Commercial subjects and arithmetic found practical application in the school store and bank and in keeping the accounts of more than forty organizations in the school. Science classes found out how to make tooth powder and cosmetics cheaply and then went about producing them for sale to students and their families. A nursery school helped the community's mothers and provided valuable experience for high school girls. The school provided facilities for refrigeration of foods, a chicken hatchery, help in soil conservation. To a large extent, instead of going into the community to find work experiences, the school was providing work and bringing the community into the school as patrons. "These children," said the faculty, "are getting an education by working on things that are helping people now." [69] Working on problems of a practical nature, the students were enriching the social, recreational, and economic life of school and community.

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[68] For full account of Wells program, see Paul R. Pierce, *Developing a High School Curriculum* (New York, American Book Co., 1942).

D. AN EXPERIMENT IN APPLIED ECONOMICS

One of the more vital current experiments in education is that sponsored by the Alfred P. Sloan Foundation which is attempting to apply economics to improve the lives of people in areas seriously wanting in the basic necessities of food, shelter, and clothing.[70] By introducing more realistic materials into the school, the experiment aims at stimulating basic activities both in school and out that will make genuine differences in the lives of the people in those communities. As such, the program is not one of occupational education *per se*, but it has commonly introduced activities that are of occupational significance. The foods project, for example, is generally accompanied by the development of gardens, both around the school and at the children's homes, which will provide for a more adequate diet. The shelter project encompasses improvement in the school building and later work on houses in the community as efforts are made to make homes more sanitary, comfortable and attractive. The clothing project involves mending clothes in school, knitting, and repairing shoes.

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[69] Holtville High School Faculty, *The Story of Holtville* (Holtville, Ala., The Faculty, 1944).

[70] See Clara M. Olson and Norman D. Fletcher, *Learn and Live* (New York, Alfred P. Sloan Foundation, 1946), for summary of experiment up to 1946. American Association of Teachers Colleges *Yearbooks* report annually the work of teachers colleges in this area since their entry into the program.

These activities have pertinence for this study since they aim at improving living conditions through the individual's own work rather than through money the individual has earned. In this way a respect for labor may be achieved which is generally lost in the customary focus on pecuniary standards and outcomes alone. The possibility of developing a joy in performance itself is related of course to the respect for work. In this sense the activities may be educative in a very real way, apart from the similarly real values of improved living conditions.

Starting in 1939 in rural areas in Kentucky (food), Florida (shelter), and Vermont (clothing), the Sloan experiment was picked up in neighboring town and city schools which made use of the materials developed in the rural schools and also prepared new materials. A few years later the American Association of Teachers Colleges joined hands with the Foundation in extending the project, by making it possible, first, for twelve teachers colleges to send one student each to study the program in operation, and second, for a consultant to visit the large number of teachers colleges which are now preparing teachers for a program centering around life's three basic necessities. The aim of the association is to show that teachers colleges working with local schools and communities can develop a school program which will improve life and the standard of living of the community, to show that the community itself is a broad base upon which to build the community-centered curriculum, and to show that human and natural resources of the community can be used to make vital contributions to educational programs.[71] Meanwhile, school children in Mississippi have built sanitary toilets to eliminate hookworm; Michigan students have worked with Indians in an arts-and-crafts program to increase the Indians' money income; children in Kentucky have centered a school program around the garden—planting it, watching it grow, observing the effect of weather on plants, fighting insect pests, helping harvest vegetables, and eating the fruits of their labor in the school lunchroom.[72]

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[71] Stewart B. Hamblen, "Report of the Curriculum Consultant for Applied Economics for the Alfred P. Sloan Foundation Curriculum Study," American Association of Teachers Colleges, *Yearbook*, 1947, p. 97.

E. COMMUNITY SELF-HELP IN MICHIGAN*

Similar in purpose to the applied economics experiment is the Community School Service Program in Michigan sponsored by the State Department of Public Instruction and supported by a grant from the W. K. Kellogg Foundation. In this case a number of rural areas and small towns have cooperated with the Service in an effort to lift themselves by their own bootstraps. The staff has undertaken a program of leadership training in the cooperating communities to avoid identification of the project in each locality as the "school's baby." At the same time the schools have been brought into the program, and students serve with adults on representative bodies to plan community projects.

Inside the school special attention is given to on-going community activities as part of the regular classwork. An in-service program for teachers centers on community improvement. Students take part in surveys, planning, community projects, recreation-building construction, training trips, and forestry work. They are thus active members of the community while still in high school—and while still under the guidance of the school. A senior "problems" class focuses its study on community problems, and seniors dramatize the program at class-night ceremonies, in place of the conventional skits; income tax auditing is done by the students in one school for their parents and the neighboring farmers; the Future Farmers of America chapter works with local agricultural committees. In all, there is more of an effort to change the content of courses than to introduce new ones, but the changed courses benefit from relation to a community program. A bulletin has been published by the State Education Department to describe what has been done in these committees.[73] Soil conservation, introduction of new crops, sewage disposal, a community center, an outdoor recreation area, a cooperative hospital, and homemaking centers are some of the projects described. These represent activities that offer youth opportunities to identify themselves with their communities through service to them, to work with adults, to discover how the work world runs, to learn the responsibilities that workers face on the job.

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* Interview with Edgar Grimm of the State Education Department, Lansing, Michigan, September 12, 1947.

[72] Olson and Fletcher, *op. cit.*, p. 69.

F. PATTERNS IN CITIZENSHIP TRAINING

Theral T. Herrick has made a study of School Patterns for Citizenship Training in Michigan which bears an interesting relation to the Detroit Citizenship Education Study and the Michigan Community School Service Program.[74] Among the patterns that Herrick describes is student participation in community projects. Herrick justifies such activities by postulating the right of youth to participate in projects that concern them, youth's ability to make valuable contributions, and the added significance that such activities bring to the school's citizenship training program. In addition, he feels that such projects help fill the gap between in-school and out-of-school experiences and consolidate school-community relations.

The activities reported in the state of Michigan involving student participation in community projects include community surveys, safety controls, community service bureaus, cooperation with the local governing council, establishment and operation of youth centers, community recreation programs, careers conferences, beautification projects and clean-up days, work experiences in the community, and activities in cooperation with the Future Farmers of America, the 4H Clubs, Boy Scouts, Girl Scouts, Hi Y, etc. Of particular interest are the values that Herrick found implicit in the projects. He judged that youth gained occupational orientation and exploration. A respect for work and civic insight through first-hand contact with social and industrial conditions were two important outcomes. Adolescent and adult groups were brought closer together. Doing was related to learning and thinking.

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[73] Michigan Department of Public Instruction, Bulletin No. 410, *Help Yourself* (Lansing, The Department, 1947).

[74] Theral T. Herrick, *School Patterns for Citizenship Training* (Ann Arbor, University of Michigan, 1947).

9. Conclusions

The programs that have been discussed in the preceding pages are not presumed to represent all the efforts that may have been made to relate work and education. They have been presented with the following purposes in mind: first, they indicate that the use of work in education is not untried even though it remains rare; second, they reveal the variety of approaches that have been employed in putting work to educative use; third, they outline the values which the sponsors hope to achieve through their programs; fourth, they present patterns that may be followed more or less closely in other situations; fifth, they provide tested models for the program of occupational education which will be proposed in the next two chapters. It may be significant, therefore, to sum up the values in each of the programs that may be capitalized upon in reorienting secondary education.

First, the Henry Ford Trade School provides an example of a factory-school where general as well as specialized education takes place in the environs of a modern factory. Useful work replaces the "exercises" of a school shop as the means of education; it is seen as playing no more important a role in skill training than in personality and intellectual development, as the Ford Plant and the automobile industry serve as a core for historic, scientific, and civic learnings that impinge upon them. In school, as in life, the occupation organizes activity.

Second, production in school shops moves useful work from industrial control to school control. Simulated industrial conditions and production of useful articles under those conditions are relied on to orient the student to the work world. Problems of realism, distribution of the product, and coordination with the general program of the school complicate the situation. Where realism is complete, we find the school-factory as exemplified in the Berea and Allendale programs. In this case, as in the factory-school, work and education can merge and a truly unified program can result.

Third, the problem of replacing simulated conditions with real ones is met in the work experience programs—both cooperative and non-cooperative. Under the cooperative arrangement skill training in particular has been achieved in industry and commerce under varying degrees of school control. The facilities of industry, the real vocational situation, opportunities to mingle with adults have all been put to educational use. Little attention has been given to general educational aims in cooperative set-ups, save in Antioch College, which purports to put general goals ahead of vocational training objectives. Where specific training is desired, the cooperative program facilitates the interaction of theory and practice; it makes possible a variety of training that the best-equipped school could not dream of; it provides experience in the work world under a very necessary school guidance. Because of generally close relations between school and employment, a highly correlated program is possible.

Fourth, as a bridgehead for work in the educational program of the school, non-cooperative work experience is important. In most cases this type of program benefits from little correlation with the school curriculum; it is an afterthought appended to the traditional academic program. As a result there is generally merely token school control: placement, reporting of earnings, discussion of orientation to work situations. The school's program is usually adapted only in the addition of work-experience discussion classes. Yet the non-cooperative program is important because it provides real work as a supplement to a non-functional school curriculum, because it makes possible a success experience for some of the non-academically minded, because its aim is usually related to general personality development rather than to specific training, and because it represents an entering wedge for work's invasion of the school domain.

Fifth, the camping programs combine values of resident education and occupational experience. They have proved themselves as means of capturing and putting to use the idealism of youth as they introduce them to the realities of the contemporary scene. For middle-class youth the summer work camps have been an object lesson in the dignity of labor. The camps run by school systems in several states indicate the practicability of operating camps during the school year as part of the school program. They point to the educational potential of a program that helps children and youth develop skills in living and working together. They have explored the possibilities of conservation as a realistic and challenging type of work experience for high school youth.

Sixth, on a national level, the Civilian Conservation Corps started out as a work project in forestry and soil conservation. Gradually it gave increasing attention to making the most of educative aspects of the job at hand. While the CCC was criticized, and with reason, for the ineffectiveness of its formal education program, it laid a track that trains may travel in the future toward youth service, resident projects, and out-of-school educational activities for youth. Lessons for the future should include (1) the need to capitalize on the idealism of youth more than was done in the "C's," (2) the possibilities that the Corps disclosed for constructive, useful, social service as a means for developing a civic conscience and self-discipline, and (3) the need for some custodial agency with positive educative aims that will provide for unemployed youth in times of economic stress.

At any rate, the question of integration with the school is significant. If the camps are conceived of solely as custodial agents for youth who are being kept off the labor market, no school ties need be maintained. But if it is felt that the work performed is in itself educative, the question of inclusion of such educative experiences in the school arises. Second, the problem of national work camps raises the problem of labor service to the community —local, national, or world. If such programs of service are to be adopted, will the educative aspect be realized, or will it be allowed to fall by the wayside, as so often happened in the CCC? If the answer lies in the need for direction by the school, how can the schools best discharge this function?

Seventh, the National Youth Administration residence centers provided experiences similar to the CCC's in some respects, but developed a superior education program parallel to greater authority given educational leaders in the NYA scheme. Its student-aid program is significant, not because of the aid given the students but chiefly because it provided work experience, albeit to a "favored few." Paradoxically, the favored few were those in need of economic relief rather than those in need of jobs as a means to personal growth. Had the latter conception prevailed, universal participation in the NYA program would have been necessary. The program, as in the case of non-cooperative work experience, was piecemeal, "tacked on." For future programs it underlines a need to correlate such service with the total curriculum.

Finally, school efforts to improve community living conditions have opened new areas of work experience that stress social service as well as productivity. Stimulated by a feeling that the school can do much to improve the community it serves, the Sloan and Kellogg programs have tried to help schools in such activities in different ways. The Sloan Foundation has tried to do so through development of materials that focus on the basic needs of life: food, shelter, clothing; the Kellogg Foundation has approached the problem by setting up independent programs in the community and then associating the school with the programs. In both it has been found that as students are stimulated to constructive activity, as they move onward from book study alone, they have improved the community and furthered their own development as persons. Of interest to us is the fact that these projects have been under community, not commercial, control. This has made it possible to stress educational gains for the student, not the product alone.

In more restricted programs, individual schools have made use of student service to develop a community spirit while performing services that are of value to the school. This type of work is limited by the kind of work that can be done, and is sometimes open to criticism that "made work" so often justifies. However, it presents an opening for schools that are attempting to bring realistic work into their programs while the groundwork for community cooperation and more extensive programs is being laid.

The following chapter will attempt to distill from American and foreign occupational education patterns those experiences that seem most fruitful in light of objectives set up earlier in this study. The last chapter will present a sample organization of these experiences into the framework of a secondary curriculum.

CHAPTER VIII

Experiences for an Occupational Curriculum

A MAJOR problem in translating educational theory into practice is the development of some tangible vehicle for that translation. Normally, the vehicle is a curriculum, the experiences of the learner that the school consciously directs. The effort in this chapter and the next will be to select patterns that occupational prototypes in this country and abroad recommend by reason of successful application, and then to organize them into a sample curriculum. First, a digression on the nature of the curriculum and educative experiences is necessary.

1. What Is the Curriculum?

The original concept of the curriculum in American education was the provision of those learnings which the youngster could not pick up in his everyday routines. At that time, occupational preparation and orientation, recreation, social welfare resided in the family's bailiwick; religious devotion was very close to the home, but in most cases the family felt inadequate to preparation of its young in this realm. That left, for the elementary school, the three R's and religion; for the higher institutions, the "liberal" arts as social graces. This concept of doing those things not handled elsewhere has persisted with many curriculum thinkers.

However, if we are committed to a notion of integration, to regarding experience as unified through the conscious organism, we must recognize the facts that the student's concerns are always with him, that he does not bring to school a different personality—except for superficialities—from that he brings to the playground or to the family hearth. With this concept of the unity of experience in mind, we must conclude that the curriculum is the totality of the child's experience, what *he* elects to take from many unrelated environments of which the school is one.

The school, because of its strategic role, can, however, serve to give meaning to the many things that impinge on the consciousness of the learner; in its effort to provide situations in which meanings can grow and in guidance to the youngster as he forms his generalizations, the school selects what it regards as focal activities. This selection is the *school's* curriculum: if it is to be functional, it will have to correspond closely to the learner's curriculum. Yet the school has an obligation to make use of the store of knowledge it has accumulated about present and probable future needs of the learner and about methods of meeting those needs. The curriculum, then, does not supplement out-of-school activities; it correlates with them in directing the learner's activities in channels that experience has proved likely to be fruitful. The test of course is in consequences of the program: an experimentalist approach requires that the program be open-ended, that a willingness persist to develop new meanings, new operations, new curricula.

The vagueness of such a concept of the curriculum is cleared up as we develop criteria for the selection of experiences based on mandates from psychology and social theory previously discussed. The following requirements are seen as those which an educative experience must fulfill. First, it meets the needs of the learner. It takes its substance from the present concerns of the learner; it is suited to his maturity level and provides for individual differences; it guarantees that these things will be done through pupil purposing and planning. Second, it aims at integration of the pupil's personality through efforts to tie the school's program to the learner's purposes and to conceive of the program as a unit, not as the sum of many parts. Third, it makes an effort to extend the horizon of experiences which the learner reorganizes in his "logic of experience." It stimulates exploration by a free intelligence. Fourth, it is concerned with development of a social conscience and democratic ideals. Fifth, it is tied to the community as a resource area, as an arena for participation, as a laboratory. Sixth, its concern with the social heritage is not as an end of learning, but as a means toward achieving the first five requirements.

2. What Are Desirable Occupational Experiences?

If an occupational program is to be justified, it must meet these general educative criteria as it goes about introducing youth to the world of work. Occupational experiences to be educative must appear as a desirable means of accomplishing these goals. At the same time a number of other requirements must be met by the program if it is to be truly occupational in nature.

First, the occupational program should provide for actual participation in production of goods and services. Second, this participation should stress general values for the most part and aim at specific job training only in the year before leaving school. Third, since general values are the aim, the student should run through as wide a gamut of occupations as is reasonable. Here the objective is an understanding of his own career choice in terms of its relationship to other occupations and an appreciation of the work done by others as a basis for social cohesion. Fourth, a career choice should be facilitated before the beginning of the last year in school, and intensive training in that career provided in the year before emergence as a member in the adult world. Fifth, specific provision should be made for bringing out social, scientific, ethical and esthetic meanings of each major occupational field in the American scene. Sixth, definite provision should be made for participation in remunerated work in actual employment situations that afford normal adult contacts on the one hand, and in work as social service alone on the other hand. At the same time, the social service aspects of everyday, commercial work activities should be brought out. It is felt that achieving these six objectives would simultaneously meet the six requirements of general education.

A. PARTICIPATION

Methods of providing for participation in work experience are suggested by a number of the programs reported. The factory-school as exemplified in the Ford Trade School and in some Soviet Polytechnics is one procedure. The school-factory is suggested by the Allendale experiment, the Berea Schools, the Indian craft-education program, and the various American schools doing production work in their school shops and on their school farms. Work camps for youth might stem from experiences of the CCC, the NYA resident centers, the International Voluntary Service Camps, or the current programs in a number of states. Work projects around the school were found valuable in the NYA student-aid program in high schools and colleges. Experience with the NYA and CCC points to the urgency of keeping such educational functions under the direction of school authorities rather than independent, politically dominated agencies.

Moving out from the school, we find occupational participation in the community in customary work environments in the cooperative and work-experience programs. In unremunerated work for the common weal, we find the activities of youth on the Sloan and Kellogg projects, where community improvement has taken first priority. In addition, opportunities for community service are found in agencies set up by the school to help perform necessary functions in the area: organizing and operating facilities for recreation centers, nursery schools, health clinics and food processing; clean-up and beautification of neighborhood; surveys of community conditions. The two types of occupational participation show the need for and the relations between working for *a* living and working for living.

In these types of participation a balance is obviously needed. In the first three years of the four-year school,* it would seem desirable to include a work-camp (because of the values of resident education), and a community-, school-, or house-service project. The fourth year might offer some type of production work in a school shop or in private enterprise.

B. FOR GENERAL EDUCATION, A VARIETY

If students are to feel a strong bond of community between themselves and the rest of the world, they will have to know how others work and live. Moreover, unless they know how others work and live they may have no choice but to follow blindly the occupational pattern set by their parents or the school. For general information and vocational exploration and orientation, the occupational program proposes a broad acquaintance with the productive world.

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* The four-year school is discussed throughout this chapter and the next since it remains the prevailing pattern in American secondary education. Obviously a similar program can be worked out for secondary schools organized to begin at age 12 on a six-year basis, on a three-three division, or on an eight-year basis with a four-four division.

First, the basis of all civilized living which has progressed beyond the nomadic stage is agriculture. The Danes had the good sense to realize that education must cease orienting students away from the soil, must begin to orient them toward the good life as it can be lived on the farm. Fellenberg centered his work education around his farm. The Israeli Labor Schools have reoriented a large group of the Zionists to agricultural life. At present in America there is no need to move people back to the farm; the pace of movement to the cities has diminished. But because the movement continues, and because 85 per cent of the people no longer live on farms, agricultural experiences acquire a new significance in education as the primacy of the soil tends to be overlooked in city life. Our science, our family relations, our governmental institutions have grown from roots in farming as a way of life. The agricultural experience in occupational education is intended to lay the basis for scientific, social and political learnings.

Second, a culture dominated by pecuniary values tends to overlook the fact that work involves social service as well as individual enrichment in a material sense. To indicate that work is not mere money-grubbing, occupational education can make use of projects of distinct value to the community, to the school, to the home; it can provide volunteer service to public and social service agencies. We have seen Michigan students helping in the forestry service, Kentucky youth helping to change planting and eating habits, Florida youngsters improving living quarters, Holtville boys and girls providing recreational facilities and refurbishing the community's school. Student campers, too, can do all the valuable things accomplished by the International Voluntary Service in Europe, Asia and America.

Moreover, work as service includes recognition of the services of the homemaker in our culture, and of the similarities of professional services, personal, social and public services in modern life. The first calls for direct efforts to prepare youth for better family living and suggests individual projects for boys as well as girls in their own homes. The second may serve to reduce to more reasonable proportions the present attraction of the professional services alone, unrealistic in terms of student abilities and employment opportunities.

Third, our modern culture puts great emphasis on buying and selling. The distributive trades and office occupations are particularly common in the lives of city folk. Mass producing, mass distribution, and mass advertising have made consumer education an imperative in the American scene. The world of commerce calls for occupational education in trade, and the cooperative and work experience programs suggest methods of providing realistic participation and a basis for study.

Fourth, to a very large extent the present civilization is factory-made. The factory has certainly replaced the home as the major productive unit. Removing production from the home and centralizing it in highly specialized units has had a profound effect on the culture. The school-factory, factory-school, work-center, production in school shops, and cooperative experiences in factories have all been tried successfully. The location of the particular school, the predilections of the community and the attitude of local industry will all determine the nature of manufacturing experience to be provided. An education, though, which neglects this very important aspect of our productive life is an incomplete education.

C. OCCUPATIONS AS GENERAL EDUCATION

In all these types of work, it is important that the major aim—personal development and social orientation through a variety of occupational experiences—be not obscured in enthusiasm for any single type of work or in achieving production without consideration of educational outcomes. On this rock, it will be remembered, the Soviet Polytechnics foundered, and on this score the Israeli Labor Schools have invited severe criticism. At all times, stress must be laid on the work in hand as an example rather than as an end in itself. The work is not performed merely as work, but because it makes real the social, scientific, ethical, and esthetic meanings of the occupation. When all the educational implications have been drawn from the work and all that remains is skill training, the work had better be dropped and new fields explored. In addition to a generalist attitude toward education, the occupational program should adopt a generalist attitude toward work: it is not preparing skilled craftsmen; it is educating youth for adaptability and understanding in a rapidly changing and increasingly complex industrial environment.

D. CAREER CHOICE AND TRAINING

The first three years of the four-year program are regarded as being general in scope and as affording try-out experiences for all youth. As a result of these explorations, the young man or woman in the last year of the program should be prepared to make a career choice that is fairly realistic. In this year the student begins to train intensively for his career. If he intends to enter an occupation requiring additional training, he will spend the major part of the year preparing for entrance into college, technical school, or other institution. If he intends to enter work immediately upon graduation, he will make use of a cooperative program wherever available so that he may be inducted into his chosen career and meet the adults in it while still under the guidance of the school.

As the occupational program meets requirements of participation, variety, a generalist attitude toward its activities, and training for a career choice, it meets, too, the criteria that determine the educative value of an experience. It is felt that at the same time as the student is meeting the major influences in our present-day culture, he is simultaneously satisfying his needs—social, personal, and vocational. The tremendous latitude in any occupation presents wider opportunity than the academic subjects afford for success experiences on appropriate maturity and ability levels. Moreover, the primacy of vocational and social interests in youth has been shown. Second, the occupation is used to organize life experiences for the student and to make it possible for him to integrate very important but generally neglected learnings into the logic of his experience. Third, the horizon of experiences which the learner recognizes is extended to include the full range of man's vocational activities, and we have seen that man's work is of man's life *not* a thing apart. Fourth, perhaps no better avenue lies open for development of a social conscience and democratic ideals than actual participation in the work activities of all men as a least common denominator. Ivory towers remain traditionally aloof from the social concern. Fifth, in a very real sense the whole community is the resource area, the arena for participation, the laboratory for learning. Last, as man has used his cultural heritage to improve his work, and his work to extend his cultural heritage, so occupational education makes a correspondingly functional use of the heritage.

CHAPTER IX

A Proposed Curriculum Pattern

THE preceding chapters have stated the theoretical basis for occupational education as a functional approach to secondary education. That the concept has been put to use in diverse places, times and ways has also been shown. Generally, however, the idea has been applied piecemeal or to a single aspect alone of the educational program. What would the curriculum of the secondary school be like if the occupation were to be used as the core of the program?

A curriculum that centers about occupational experiences as described in the preceding chapter is set forth in the pages that follow. It is presented not as a blueprint which the writer would impose willy-nilly on any school system, but rather as the objectification of an idea, as a point of departure for discussion by those who are interested in implementing such a program. It is also set forth as a more tangible basis on which to judge the claims made for occupational education. It is not proposed as a die for uniform reshaping of existing institutions. Obviously a thoroughgoing change in a school's orientation cannot be accomplished by ukase. Change depends upon a basis of deep understanding which grows as those concerned participate in determining the direction of change and then in effecting that change. Learning by teachers, too, is selective, and teachers will select those programs which they can assimilate into the logic of their experience because the programs meet their needs. The following material, therefore, is presented as a basis for discussion, as a model to be interpreted by the artist rather than as a pattern to be slavishly executed.

Before outlining the proposal, it may be wise to consider some values involved. Proposals for putting the occupational program into effect meet with skeptical response in those who feel that such an education depends upon the prior establishment of a culture which accords a higher regard to useful labor and less to "unearned increments," a society in which cooperative production for use replaces competitive production for profit. The writer recognizes difficulties and obstacles that arise in attempting to put to social uses institutions that are primarily individual in nature. Yet the alternative is to retire to an ivory tower and remain strangely detached from social tides while purveying an education serenely unconcerned with the world for which the school is supposedly preparing its learners. Such a position denies to the school its chief purpose in a democracy—extending democratic institutions. The thesis of this volume is that an improved education need not wait on social change, but that it may precede that change and help point directions for it. The school need not be caught in the backwash of a cultural lag; as a conscious agency it may serve to reduce the lag between the material and the adaptive culture.

What are the social values that occupational education may further? First, if we are to hope for the maintenance and extension of democracy in America, we must give greater attention to its social and economic bases. The democracy which was an expression of the independence and equality of the freehold farmer of revolutionary days must become now an expression of the fundamental equality of *inter*dependent citizens as each contributes his share to the work of the world. If there is to be no split between labor and proprietor groups, there should be no split between work and education. Second, if the school is to civilize the industrial giant which bestrides the world, as Counts puts it, the school must grow conscious of and attend to industrial life as we know it now and as the best minds can envision it in the future. Occupational education insures that attention; more, it can direct attention to an industrial life that represents social service as well as concern with profit alone. Third, if we conceive of democracy as the expression of a belief in the worth and dignity of the human personality, occupational education puts that belief into action, for to the extent that it makes work meaningful and significant, it prevents the degradation of the mass of humanity that must work for a livelihood. Moreover, as it serves to integrate the activities of the school and makes possible the integration of adult activities, occupational education builds toward a richer personality. Fourth, if we are committed to the method of science—free and reasoned inquiry as the guide to conduct,—occupational education insures the carry-over of this approach from scholastic routines to real life situations because at every point the program provides for participation in those very situations. Fifth, if we seek goals of world peace, occupational education can contribute by helping youth to recognize work as a common denominator; it can foster community service as the basis for a civic conscience that builds international as well as national and local loyalties.

It is felt that the ultimate choice is to be made by the learner, the teacher, the parent, and the community. Yet while the principle adhered to conserves to each community the fundamental responsibility for its schools' curriculum, the conviction remains that fulfillment of that responsibilty necessitates movement in the direction of an occupational program such as that to be described below. As parents, teachers, and children come to see more clearly the objectives of education, it is felt that they will find in the occupational approach a highly suitable means of achieving those ends. Through occupational education, the school promises to meet more effectively the demands made by employers, workers, and consumers; it promises to aid the youngster to develop a richer, better integrated personality; it promises to build citizens better able to solve dilemmas in political and economic life.

1. Overview

An over-all program is envisaged which would begin in the ninth year with a three-month core whose chief purpose would be orientation to the school and its program and a very general introduction to the work world and its achievements in human history. Its primary aim would be to acquaint the youngsters with each other and the functioning of the school on the one side and to develop an awareness of how the community gets its living on the other. It would also serve as a time for stock-taking—to disclose the wants and needs and purposes of the freshman group. The second core would be one on agriculture extending to the end of the year and running through the summer months as a work-camp experience. The center of this core would be a three-month work-camp cycle based on a suitable plan of rotation to ensure the presence of enough students on the school farm to maintain it throughout the year. Five months in addition would be spent in school tying together the social functions of farm life and its meaning for the country as a whole.

At age fifteen (tenth grade), the student embarks upon a two-year program which involves volunteer community service, school production jobs, and work experience in commerce, service occupations or manufacturing. For various reasons it is advisable to plan volunteer service work and participation in a project of community improvement in the tenth grade and outside work experience and school manufacturing in the eleventh. Of these the most cogent are (1) the lower age of the tenth graders, (2) the greater control that the school has over volunteer work, and (3) community attitudes toward "child labor." The service fields include homemaking (both as a career for some and as a family responsibility for all), personal service occupations, public service (civic and social), and the various professions. The central work activity would include volunteer service in one of the four areas mentioned and group participation in a project of community improvement under the school's sponsorship and control.

The eleventh grade's activities would center about (1) a cooperative work experience in a commercial establishment (office practice or distributive trades) and (2) production work carried on in school shops simulating conditions in representative manufacturing plants or cooperative work in such plants. The cooperative work would be limited to the twenty-hours-a-week maximum recommended by the United States Office of Education, and class attendance would approximate the same limit.

The last year in high school would be based on the premise that a tentative career choice has been made as a result of three years of orientation and try-outs. Accordingly, the work experience in the last year would be restricted—save for inevitable changes in plans—to a single type of employment, preferably on a cooperative basis in local business or civic-social agencies. A course labeled

"Induction" might serve to bring together students on cooperative jobs to help solve problems of general nature and to knit together —through the common element of working—the producers of goods and services whom the school is sending out into the world. Other school activity would include assistance in organizing experiences of the preceding three years and the development of skills to improve adaptation to the chosen occupation. In the attempt to organize previous experiences, renewed attention might be given to problems of citizenship, leisure, family life, ethics, and health as encountered in the selected vocation.

Such a program promises to answer the problem of divisive specialization so eloquently set forth in the Harvard Report. It is felt that the Harvard Committee has not offered a solution to the problem in saying that the way to avoid divisiveness is to pretend for four years that specialization does not exist. The solution lies in recognizing the existence and advantages of specialization—and in acquainting each maturing member of our society with the general function and way of life of each other member. This is the way to establish realization of the interdependence of the diverse elements that make up modern society. As such, it is the social purpose of the cores suggested above.

2. The Six Cores

With this overview of the program in mind, we can go on to inquire in detail into the central experiences provided in each core. Later sections will discuss use of the heritage as resources to improve work and study, problems of student planning, individual differences, and meeting youth's developmental tasks.

CORE I. EXPLORATION

The initial core is intended to provide the student with the opportunity to find out how his new school "works," how the community gets its living, and how he may best take advantage of the learning facilities of school and community. In cooperative, informal surveys with other members of the class, the student finds a place in a working group. The purpose of the core as relates to the community is introductory only, but the student discovers information as to the variety of work opportunities in the community, the business enterprises and labor unions, the services provided by the community through civic and social agencies. In the area of education, the school guides the youngster toward a statement of what his goals are in school and helps him to plan his use of school facilities to achieve his objectives. This, too, is a time for inventory: pupils and teachers cooperatively appraise the needs of individuals and the group in areas of health, personality development, social maturity, and tool mastery as a basis for future work and study. The school farm and shops are visited; the school's community projects are inspected. Information about work experience programs is disseminated. Motion pictures, guest speakers, the radio are used to fill in gaps left in the visiting program.

CORE 2. AGRICULTURE

The center of the agriculture core is a three-month period spent on the school farm combining work experience and community living. This period would be expected to capitalize upon opportunities for training in cooperative living and democratic human relations as well as for orientation to one of the basic industries. The period is not meant as vocational training for farming, but as an exploratory experience for both rural and urban youth. Obviously the program would have to be differentiated for farmers and their city cousins. The values of resident schooling might be combined with experience in productive labor.

An additional five-month period in school would correlate scientific and historical information with the agricultural work experience. In describing the Asheville (North Carolina) Farm School, MacConnell, Melby, and Arndt stress the importance of agricultural experiences for all youth, a sense of the primacy of the soil in the life-sustaining activities of all human beings. A familiarity with the agricultural base of society, they say, is necessary for understanding the superstructure we have erected on that base.[1] The core that centers about agricultural experiences, then, should serve as a basis for the discussion of the origins of American democracy, of the significance of the freehold farm. To this are added problems of concentration of ownership, farm tenancy, and sharecropping, the influence of the farm bloc in national politics, artistic and literary works stemming from the "nature" schools.

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[1] C. M. MacConnell, E. O. Melby and C. O. Arndt, *New Schools for a New Culture* (New York, Harper, 1943), pp. 173–79.

Of equal importance with the social significance of farming is the scientific orientation that is facilitated. Working with animals and plants, the student learns cause-and-effect relationships—finds that things don't just "happen," but are caused. The wonder of life remains, but ignorance and superstition are removed. The science of growing things is automatically correlated with working to make things grow.

Of course, practical difficulties would be encountered in putting such a program into effect at one stroke in large cities. Providing a three-month farming experience for every freshman in New York City, for example, would necessitate enough farms to accommodate some 50,000 youngsters. Yet we have seen camping experiences provided for all of a smaller city's children in a single grade. Here, as elsewhere, it would be necessary to begin with pilot-farms and pilot-schools to experiment, pave the way, and point adaptations necessary in a given area.

CORE 3. SERVICE OCCUPATIONS

The tenth year in school is seen as a strategic time for attending to a threefold educational concern: orientation to careers in the professions and services, development of homemaking skills and knowledge required by all, and community service. Most of American youth dream of careers in the professions and services: at this point they can find out through voluntary service what the jobs actually involve, what the requirements are, what opportunities for placement exist, and what their own real aptitudes are. All youth plan roles as members of families and most will become homemakers; many will follow homemaking and the domestic arts as a vocational choice: here is an opportunity for serious consideration of a vastly expanded "home economics." The great cry in America is the lack of civic and social conscience: working for community improvement combines the values of work experience with concepts of social service (as does voluntary work in the professions suggested above). Three centers may then be defined in the year's work: a homemaking experience, voluntary service in assistance to a professional worker or agency, participation in a productive project for community improvement. For those students who show interest and aptitude, it may be advisable to prepare for a cooperative work experience in service fields for the six-month period following this core in place of cooperative work in commerce, an eleventh grade core.

In the service field opportunities for participation may be found for all levels of ability. It is a field which is attractive to a large proportion of youth and which is occupying an increasing proportion of the nation's workers. Socially useful service may be performed in the adjuncts of the school itself. A nursery school and kindergarten can serve the community and provide valuable educative experiences for youth as well; dental and medical clinics need assistants of various kinds; legal aid offices, social welfare agencies, city departments can provide job opportunities. Schools may operate beauty and barber shops for their own personnel. The whole gamut of civil service careers may be disclosed to students as they provide volunteer service to local, state or federal agencies. Campaign work at election time to spread information and "get out the vote," participation in drives to raise funds for community chests, clean-up campaigns in the school and neighborhood, construction and operation of youth recreation centers, big-brother services to younger children—the opportunities for service are there if the schools but seize upon them. Doubtless some localities may seem to offer more meager resources than others, but it has been precisely in rural environments with relatively little diversity that a number of service projects have been found successful. In some cases absence of facilities may necessitate use of vicarious media—motion pictures, radio, books, magazines, but in all cases these media will be turned to anyway in order to enrich a necessarily limited personal experience.

In connection with the services men perform for each other, the impact of modern life on the family and home, the current health problems of the student and community, the need for leisure hobbies, sports, and social activities and for intelligent radio and movie attendance are legitimate and correlative parts of the occupational curriculum. Citizenship training derives from civic participation and civic service, from democratic human relations, from efforts to improve the community even more than it does from the study of the mechanics and history of governments—although use will be made of the culture's accumulated information in this area in order to push forward the activity in hand and to give it meaning. Once the study becomes meaningful, the task of the school is simplified, for then the basic problems of democracy cease to be textbook concerns eventuating only in lip-service allegiance, and informed, activating affirmations are possible.

Science has much to offer in this field. The use of household appliances may be the limit of some students' ability. Interest in the research scientist as a service worker will appeal to others. Students can now discuss with meaning the social responsibility of "pure" science. The scientific method is seen in action. The development of the social sciences may also attract some students. Art—applied and utilitarian as well as "fine"—takes its place as a field of service, and the literature of service to mankind—the heroes of peace—opens new horizons.

The tool subjects here will vary with the interest and ability displayed. The boy helping out in the dental clinic may find a need for certain college-preparatory subjects and discover how well suited he is to that kind of study. The girl helping to prepare school lunches will become aware of her own affinity for dietetics and food chemistry. Reading, writing, speaking and number needs will dictate the tool content for each student; it need not be the same because of allegiance to a preconceived "common learnings" program. The common learnings lie in attitudes of responsibility for the world's work and welfare. The cultural heritage is drawn on as pupils and teachers working together discover needs to enrich the on-going program; and if autonomous interests in special aspects of the heritage develop,—so much the better.

CORE 4. COMMERCE (ELEVENTH YEAR, FIRST HALF)

Both office practice and distributive education are included under the heading of commerce. Past experience of many schools has shown the practicability of cooperative work programs in this field. Here a six-month cooperative (part-time) work block can be devoted either to commercial or service fields while the student spends half a school year on commercial occupations. (This would include one summer month of full-time employment.) The student is now sixteen and permitted to work part-time throughout the country.

With a wealth of source material coming from the student's work experiences, the school program can be concerned with the problem of city living much as it was devoted to rural living in the agricultural core. Here the farm boy may get a more realistic picture of city life than Hollywood depicts, and the city cousin can become more conscious both of the resources of city life and of the limitations that it imposes upon the city dweller. Mercantilism and the commercial revolution, world trade and international relations, problems of management, the implications of corporate organization and finance capitalism acquire new significance as the student works in the world which the textbooks discuss. Business arithmetic, the operation of business machines (typewriter, calculator, mailing devices, duplicators), stenography, bookkeeping, and accounting become meaningful tools; the problems of consumer protection, of buying wisely, of government regulation of industry become vitalized citizenship training as perplexing situations in the present replace sterile study of political forms. Leisure problems of the city dweller—physical, social, and recreational—relate to study and work at hand, and are not a thing apart—ill-attended after-school "clubs."

The commerce core draws on the physical sciences to find out more about transportation and communication; students consult the arts to help them with interior decorating, beautifying the home, advertising; they discover in the literary heritage—from *The Merchant of Venice* to *The Hucksters*—description of and protest against business practice. They find communication tools real helps as they uncover needs for business letters, reports, filling out forms and applications, telephone conversations, and interviews. The influence of city life upon the family, the problem of careers for women outside the home, problems of breaking down social isolation in the metropolis correlate social learnings with the occupational core. Association with adults in the work experience builds independence from parental control, and success experiences in the business world help build security and self-confidence, thrust youngsters into situations where ethical choices become significant.

In a field such as this the school can do most to meet the demands of society. The unsupervised youth in the business world is subject to disheartening failure experiences, to development of undesirable ethical and work attitudes, to the development of a mercenary selfishness, to exploitation by employers. Retaining control through providing experience while the student is still under its protection, the school can serve to prevent these undesirable developments while it inducts the student into the world that he will either remake or adjust to. No longer washing its hands once the student has piled up the approved cordage of learned lumber, the school is now responsible for his adjustment to the world about him.

CORE 5. MANUFACTURING AND MINING (ELEVENTH YEAR, SECOND HALF)

Finally, the large field of manufacturing and mining takes its place as the focus of interest. Here a variety of experiences suggest themselves as possible centers—with the common element the type of industry in which the experience is gained. In some schools, school shops may be adequate to handle the problem of providing productive, socially useful, part-time employment for its youth. In others there may be available paid employment (part-time) in industry. In some cases it may be desirable for the school or a number of cooperating schools to operate work camps which may be used for part-time employment and training of boys and girls.

One of the large problems in this area is distribution of the product. School and community may make use of products, and various methods of sale and distribution in practice have been noted. It is advisable to recall that the student derives relatively little value from his work without the feeling that his product is of use to someone. Pride in doing useful work and standards of accuracy, precision, and workmanship fall by the wayside, and the chief objectives of the program are lost. The cooperative arrangements described in the Ford and Chrysler plants in Detroit are a practical solution, but signs of wide extension of this program are lacking.

If problems of placement and distribution are solved, the possibilities of the program for developing educational implications are intriguing. The scientist relates physics and chemistry to technology in a machine civilization. The historian is interested in the industrial revolution, the rise of capitalism, labor relations, government regulation, and social insurance. The artist is interested in the functional art of Mumford's "neotechnic phase" of the machine. The philosopher is concerned with ethical implications of the growth of cities, of the concentration of wealth, power, population and pressure groups: these are the problems of the citizen as well. The health problems of the indoor worker, the leisure problem of the city dweller, the problem of self-expression for the assembly-line worker, the family problems in a home that has lost many of its traditional functions: the material for education is indeed rich. The tools of learning—reading, writing, speaking, calculating—become real as they are applied to occupational life in mine and mill.*

CORE 6. INDUCTION: SPECIAL SKILL TRAINING (TWELFTH YEAR)

As the student enters his last year in high school, attention shifts from general work habits and orientation to selection of a vocation and acquisition of the degree of skill necessary to get a job, to hold a job, and to make promotion possible in the future. For the terminal student, the center of the last year's work is a cooperative work program in the chosen vocation. For the college and technical-institute entrant, the last year's work centers primarily on preparing the student for successful adjustment to the new institution—in most cases a program of college-preparatory subjects. In either case—terminal or preparatory—the focus is primarily vocational.

But parallel with the specialist training that takes major emphasis in the last year would be a continuing general program. For the individual student the need arises to tie together the experiences of the preceding years; for the group there is the necessity of tying together the various types of work and preparation that its members are engaging in. The core teacher—or guide—is seen as directing class consideration of work problems of general interest: in comparison of jobs and job conditions lies hope of seeing the general work pattern which makes all specialists kin. Community of interest should spring from a sense of community in working and the problems of work rather than merely in a cultural heritage which has not been made functional. For the rest, the school will want to be assured that its graduates are going to be prepared to meet problems in human relations, problems of leisure, problems of self-expression, and problems of citizenship on a plane commensurate with their abilities and occupational expectations. In the twelfth year the school will project these roles against a background of working and living that the student has already developed—and this is no less true of the pre-professional than of the beginner-artisan. The school will seek to advance the terminal student's economic efficiency by extending cooperative work to full-time placement and by periodic follow-up activities until a minimum vocational adjustment has been achieved. It will help the college entrant find his way into a desirable institution and attempt to set up cooperative relations with the college as part of a joint follow-up guidance program.

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* Government regulation prevents employment of minors under eighteen in most mines; as a result the problem of work experiences in areas that are predominantly mining regions arises. Surface operations in mining companies suggest themselves as a possible alternative for direct participation. For the rest the solution lies largely in the area of "study-about," with parallel participation in local manufacturing, commerce, or service trades as a substitute for mining activity. The same problem arises in use of power-driven machines in woodworking.

In addition, the school will want to be satisfied that the diverse experiences of the preceding years have been related and integrated into a useful body of knowledge, skills, and appreciations. Some type of seminar seems to be called for in which an effort is made to review and reinterpret school-directed experiences, to discover gaps that have been left and find ways that students can, on their own, go about filling those gaps, Some practice in undirected study will have to be introduced if students are to find out how to continue their education once they leave school.

3. The Resource Areas

Making use of existing institutions as a method of education puts to work the present end-point of the cultural heritage. It takes advantage of the conclusions of a vast amount of experience and research. If education is to be complete, it must also be concerned with the process by which the heritage has grown. Without participation in this process, the coming generation would itself be hampered in pushing the frontiers of experience forward.

This process has generally been objectified and classified in many kinds of subject matter. Application of this subject matter as a means has helped the race achieve its functional ends. The usefulness of subjects applied in this sense has aroused general admiration until the subjects themselves, rather than their uses, have become idealized, and in schools the subjects have been taught as ends in themselves. The problem at hand is to recognize the nature of the usefulness of organized subject matter (i.e., as a means) in human life, and to take advantage of that use in the school. When this is done, it becomes obvious that the subjects are to be used as resource materials (for that is how the race has used them) as youth face problems, not as "contents" to be digested.

The problem then is translated to one of organizing experiences and knowledge. The advantages of organized subject matter have been referred to in the section on the core as a functional approach to education. However, this organization must wait on the building of experience to a certain extent; it cannot precede the laying of an experiential foundation at least; and in many cases it needs an entirely new orientation if it is to be functional in facing life's problems.

School faculties will want their students, upon graduation, to have acquired certain organized bodies of skills and knowledge in many areas: communication and computation skills; social relations in the family and community; an understanding of democracy and the history of its growth in the United States and in the world; the scientific method and the various fundamental discoveries in the sciences; economic relations between producer and consumer, employer and employee, government and interest groups of all kinds; and so forth. It is not to be expected, however, that these organized bodies of knowledge will necessarily coincide with academic disciplines even though they may draw quite largely upon them. The differences become acute, particularly, as we move to an organization that reflects the life concerns of people rather than classifications of value primarily to scholars and academicians. In each community there is a real need for all concerned—pupils, teachers, parents, citizens—to come to grips with the problem and to determine what the essentials are. The core teacher and his students can then meet the problems of planning and make sure that somewhere in their high school course they give adequate attention to the essentials that are functional in nature.

An attempt to do something of the sort is presented here in the chart on page 170. Such a chart would need careful organization in each community and could scarcely be copied from any "master plan." The chart here included is presented to indicate the nature of correlation of school units with work units; it also shows the need for drawing upon the heritage and the possibilities of making wide use of that heritage.

The vertical axis of the chart is largely an extension of the Seven Cardinal Principles. Ethical character development has been omitted because it is not seen as being in the same dimension as the other principles—not being translatable into a resource field with a body of knowledge to be drawn upon, but rather a function of the whole school life. It is felt that ethical character depends for its development upon multiplication of real life situations—as suggested in these cores—where choices are to be made and consequences faced, and not alone upon academic study of literature, history, and religion.

It is to be hoped that this chart will not be viewed as justification for a departmentalized curriculum. It is meant rather as an indication of activities and studies that may draw their material from various subject fields. In general these studies should be guided by the core teacher, with cooperation of specialists where this would be fruitful. Ideally these specialists would be experts in the *application* of their area to life problems, not merely scholars in a given academic discipline. But regardless of whether the teacher is a "generalist" or a specialist, the centrality of the core should be kept in mind and the study at hand related to it. In this way, it is felt that subject matter may be functionally reorganized and the maximum value drawn from its study.

4. The Language Arts

The tools of reading, writing, and speaking have been omitted from the chart because for the most part their development depends upon exercise in the context of the cores and of the other resource areas. This does not mean that no need is seen for specialist help, particularly remedial, in reading, writing, and speaking. Nor does it eliminate the use of such "drill" periods as may be necessary for the development of power as the need arises. However, it is hoped that the bulk of language-arts development can be encompassed in the context of the core activities that also involve citizenship, home life, history, vocational preparation, recreation, etc. Certainly rich materials and opportunities are present as needs emerge for social and business conversations and interviews; for writing letters and reports, and filling in applications and government forms; for presenting and discussing matters of all kinds affecting student life in the classroom, on the farm, in the shops, on the job; for reading for occupational information, scholarly curiosity, or general enjoyment.

In addition, the language arts should give greater attention to the dominant language arts in America today: the radio and the motion picture. These art forms should be considered not merely as "audio-visual aids" for development of other learnings; their significance as educative and entertainment media in and of themselves should also be recognized in language-arts classes (or in the core as it turns its attention to recreation), and serious and continuing attention should be devoted to appreciation of these media. One might very well consider reversing the present ratio between attention to books and attention to movies and radio in "English" classes.

5. The Place of the Occupational Cores in the Curriculum

The discussion of cores in Chapter IV pointed out that the core, while the central part of the curriculum, does not "swallow up" everything in the school. Thus, special remedial services, special interest offerings, health and recreation, student government, and vocational preparation are normally left outside the core. The occupational center, however, would include vocational preparation and would at times bring in the other four areas. Those four areas, however, are viewed as maintaining their integrity.

The chart presented offers a wide variety, covers much territory, and perhaps gives the impression of numerous activities going on at the same time in helter-skelter fashion. If all the activities were to be carried on simultaneously in any one core, the effect no doubt would be kaleidoscopic. What is intended, however, is that in the time block assigned to the core, the various areas would come up for

CHART: THE CORES DRAW ON RESOURCE AREAS

	1. Exploration	**2. Agriculture**	**3. Service Occupations**
HEALTH	Personal health habits and appearance required in occupations; community health problems and agencies.	Personal health on the farm; safety and health hazards; rural sanitation; care of livestock.	Family health problems; sickness and hospitalization insurance; first aid; sick room care; professional health services and the homemaker.
CITIZENSHIP 1. Participation	Organization of class for visits; class and school government; service to school.	Life on school farm; planning activities on farm and in school.	Volunteer service to civic and social agencies; a community project.
2. Study	Development of the machine and the machine age in America.	Freehold farm and significance to American democracy; frontier and western movement; slavery; agricultural revolution; farmer in national politics past and present.	Expanding government functions; democracy as social service; social responsibility of professions; role and history of school in America; relationship of government agencies; the checks-and-balances theory in government.
HOME	Responsibility of youth in home; a minor home project.	Life on the farm. Family relations; growing up on the farm; budget; cash income; chores.	Service to school nursery, kindergarten, cafeteria as lab experiences in "home ec." Dietetics, home decoration, democratic family relations, government services to homemaker. *A home project.*
TOOLS			
1. Language Arts	See separate section on the language arts.		
2. Number	Evaluation of present skills; remedial work; planning future program for individual needs.	Computations for planting; budget; prices on school farm; use of government reports and index numbers. Related algebra, geometry.	Family budget; public budgets, tax rates and income tax reports; scale models for home decorating; for college preparees: organized mathematics.
3. Science	Brief view of bases of machine age; steam and gasoline engines, electric motor.	Science of growth; biology; plant chemistry; the beginnings of modern science.	The scientific method and the scientist; household appliances; the social sciences.
THE ARTS	Exploring abilities in music, the graphic arts; photography.	Nature schools (and protest) in graphic and literary arts; applying art to farm living.	The artist as a service worker. Art in the home; architecture of public buildings, roads; literature of heroes of public service. Art and personal appearance.
RECREATION	A continuing program to meet needs stimulated by the shorter work week, by commercialized entertainment, and by those types of labor providing no outlet for self-expression. The needs and facilities for recreative activity of each kind of life. Developing (1) sports for continuing use, (2) social skills, (3) hobby skills. The motion picture and radio; appreciation and amateur performance.		
VOCATION	Job opportunities in the community.	In cores 2, 3, 4, 5: job analysis, local job opportunities; aptitude and interest appraisal; try-out experiences; elementary skill training of general nature.	

4. Commerce	5. Manufacturing
Health problems in the city; personal health problems of the indoor worker; the community's health needs and agencies meeting them.	Safety and health hazards in specific occupations; accident insurance and workmen's compensation; health insurance; life insurance; public health problems.
Work experience; class and school government. Participation in an elections campaign; campaign for political action or an opinion poll.	Work experience; class and school government. Survey of unions in community, employment practices, intercultural relations or other project chosen for core. Participation in associations.
Development of commerce; discovery and growth of America; imperialism and international relations; the world wars. Consumer problems; distribution problems.	The Industrial Revolution and its effects. Government regulation of business. Labor relations. Industrial democracy. Influence of pressure groups on government.
Life in the city and problems of family living and growing children in the city; the family budget; careers for women and effect on home—the adjustments necessary.	How the machine age has affected the family. Responsibilities of children and youth in families where mother works; responsibilities regardless of mother's employment; what independence from parental control entails.
See separate section on the language arts.	
Business arithmetic; bookkeeping, accounting. Use of calculating machines; interpreting graphs and statistics. Orienting activities here as base for later work.	Use of gauges; number processes as used in particular occupation; individual work for special needs in number area.
Electricity in transportation and communications. Atomic theory as basis of electricity.	Physics, chemistry and technology as applied to manufacturing and mining.
Commercial art; advertising; business in appreciative and protest literature and art; functional design in the city; applied art in home and factory.	Industrial design; architecture, furniture, painting, ceramics, plastics, photography. Literature of manufacturing and labor relations.
Continuation of recreational programs.	
Analysis of job opportunities, personal qualifications, and interests; try-outs ond skill training as in preceding cores.	

consideration serially, rather than simultaneously, and as teachers and students sensed their pertinence. They would appear then as "units" in the core.

What would be the time block assigned to the core? Various considerations must be dealt with. First, at times the participation phase will cover almost the entire school day—as in the three-month agricultural camp cycle; at others, half the day will be given to cooperative enterprises; in still others, participative activity will be limited to but a portion of the school year. Where participation is great, core-class activities might well be limited to a single period for the purpose of providing time for other school services while still making sure that appropriate generalizations are drawn from the participative activity. In cycles where participation is limited or held in abeyance, half the school day would be given to the core-class for elaboration of its study and discussion units. Second, at times the core would be giving direct attention to recreation, health, and special interests. In those cases, the school specialists would be invited to work with the core, and separate time allotments would not be needed. The program is one that calls for a great deal of flexibility and long-range planning. There is no reason why students should not share in this planning. Third, many of the participative projects will be entirely under the control of the school. In those it would be expected that the half-day allotted the core would include both the work involved and the generalization and discussion necessary. The remaining half-day would embrace health and physical conditioning, special interests, and remedial work.

6. Individual Differences

In view of the vast differences that mark the high school population, what provision is made for varying interests, abilities, and personalities? Provision is made in two ways—in the occupational (or laboratory) phase and in the classroom phase of the program. First, it is believed that there is a job for every level of ability in each occupational grouping. Agronomist, entrepreneur, and field worker are all essential parts of the rural scene. Not only surgeons and nurses, but laboratory technicians, hospital attendants, launderers, and food handlers play necessary roles in the hospital. The modern factory employs time-and-motion analysts, accountants, often chemists and engineers, as well as tool-and-die makers, machine operatives and assembly-line workers. An intelligent guidance and placement service in the school will direct its youth to those jobs in the school program which promise a maximum of satisfaction and excellent prospects of success.

Second, the classroom phase, while represented above in an undifferentiated chart, need not be construed as a single path. Skillful teachers in exploring the core with their students will direct them to studies most in keeping with their abilities and interests while retaining heterogeneous grouping in the core's main activities. Tool training will require differentiation as different experiences and goals in any one core necessitate finer or cruder tools with which to work. Number, science, and language arts units in particular will require class differentiation as well as individual treatment.

The recreative program in addition should be geared to, even determined by, individual interests. The sole requirement should be that each student leave the school with ability to derive enjoyment and value from sports activity, from social interrelations, from a hobby craft.

Last, considerable time each year should be left free for the student to pursue his interest in the vocation he has tentatively selected as a result of, or in some cases prior to, his exploratory core experiences. If subsequent change of heart is not too radical, this work may serve as a basis for skill training in the last year. Otherwise, values that can be transferred to hobby interests, and the general value of application to a task, should be seized upon. Specialized activity of this kind will of course include intensive preparation in areas selected by prospective college entrants.

7. Teacher-Pupil Planning

It must appear to some that an elaborate framework for cooperation between the school on the one hand and a farm, production shops, commercial and manufacturing enterprises, and community agencies on the other will inevitably hamper the freedom of the teacher and students in planning to meet their needs and achieve their purposes. The nearer we come to actual work conditions, the more must this seem to be true. Yet, if we grant the necessity of establishing a framework in general prior to student participation, we find within the occupational framework considerable freedom for teacher-pupil planning.

We have previously noted that the student must share in planning his educative enterprise. However, we have also recognized the responsibility of the school to make use of its fund of accumulated knowledge about the learning process, the individual, and society in order to direct the learning activities and guide the planning of the young. This knowledge is employed in working out the framework within which the pupil plans and learns, in developing materials of instruction, and in guiding youngsters as they make their plans, follow through on them, and evaluate them; hence the justification for working out a "curriculum" prior to the opening of the first day of school.

But granted the framework, what are the opportunities for teacher-pupil planning within it? First, in general each core should be free to decide what aspects of the occupation at hand it wishes to inquire into. Thus, the "subject matter" or experiences indicated in the chart would be suggestive only—for the teacher's direction and not necessarily for the students'. Second, the day-to-day activities of the core would also be subject to class planning. Third, the nature of the core's projects or products and the use to which the product or project would be put are decisions to be made by the group. Last, the assignment, and rotation on, tasks should express the planning of the group in those situations where the school is the only institution involved directly. As the core group decides upon the nature of work they would like to do and the aspects of the occupation they would like to study about, they share with the curriculum-planners in setting the purposes of the activity.

More specifically, the agricultural core would include these planning activities: (1) planning the use of the school's farm land assigned to the class following survey and study of pertinent factors; (2) planning the daily routine on the farm; (3) planning individual projects as well as group work on the farm; (4) planning study activities that center around farming; (5) managing daily activities in school and on the farm; (6) planning distribution of the farm produce. The service core would involve selection of a project of use to the community and of educative value to the class, the organization of the project, planning a home project, planning school activities related to the community project, the home project, and volunteer service. The commerce and manufacturing cores would permit much less planning of work activity, save for initial selection, unless these work experiences were carried on exclusively in school shops, offices, and stores. But the necessity of learning social restrictions on freedom of choice in a real setting should not be underestimated. In all cores work will be performed under direction, often without opportunity for student planning; it is the obligation of the school to make educative use of the directions. However, school activities related to work experiences can retain the self-planning aspect. Determining both what is worth studying and how to go about studying it are legitimate teacher-pupil planning areas.

8. Materials of Instruction

In discussing life-adjustment studies, in the 1939 Inglis Lecture, Prosser noted the difficulties involved because these studies could not boast the organization of subject matter, the development of methodology, and the training of teachers achieved by the conventional program.[2] Occupational education, as a life-adjustment approach, presents the same problem. As a result, perhaps the chief problem the teacher faces in this area is the dearth of organized material. Since most textbooks are organized around the academic disciplines, they are not oriented to a functional program.

The absence of suitable texts is also a stimulus and a challenge, since it prevents slavish following of the non-functional texts so prevalent now and in the past. The challenge, however, involves the obligation to develop materials that will be better suited to local needs and problems. Two solutions may be noted. First, the experience of the Applied Economics Experiment should be recalled.[3] The experimenters found that the way to orient the curriculum to pressing local concerns was to develop materials locally; from these materials they stimulated local improvement as well as curricular change. Second, a technique employed with various functional curricula is also applicable here. Teachers have discovered the use of "resource files"—an accordion file, file-drawer, or closet full of materials pertaining to a specific unit gathered cooperatively by teachers and students alike, and in some cases collected in the library in a box that might be transported on a dolly to a place in which it was needed.

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[2] Charles A. Prosser, *Secondary Education and Life* (Cambridge, Harvard University Press, 1939), pp. 23 ff.

[3] See Maurice F. Seay and Harold F. Clark, "The School Curriculum and Economic Improvement," Bureau of School Service, University of Kentucky, *Bulletin* (September 1940), XIII, No. 1.

Obviously, either method of developing instructional material will depend upon a vast amount of pre-planning of cores, of anticipating possible materials the students will need as they approach the core. In no case, however, will the pre-planning be able to anticipate every need; as students find that they have to "dig" for information they want—as they realize that an approved textbook is not the be-all-and-end-all-here—the educative process can really get under way. Teacher ceases to have all the answers, but he knows how to guide students to seek them out.

9. Youth's Developmental Tasks

To a certain extent discussion of the proposed curriculum has focused on meeting social demands. How does the proposed scheme help youth fulfill individual "developmental tasks" such as Corey posits: coming to terms with their own bodies, learning new relationships with their age-mates, achieving independence from parents, achieving adult social and economic status, acquiring self-confidence and a system of values?[4]

It is believed that an occupational focus in education is of material advantage in meeting all of these goals, few of which can be approached directly. In childhood, bodily development is aimed at adequate performance of necessary life functions. As the adolescent matures, he is concerned with that bodily development which will help him make a living and enjoy the life which his occupation supports. Interest in achieving physical manhood and womanhood is not an obsession with bodily development *per se*, but an interest in occupational and social goals that may thereby be attained.

Genuine experiences of youth in living and working together represent a realistic approach to problems of peer-adjustment. Artificial school dances and parties in the gymnasium seem a halfhearted attempt to help the student in one of his urgent concerns. A living-away-from-home experience on the school farm, cooperation in prosecuting a community project, working side by side with other boys and girls in real occupational settings are viewed as methods of "social engineering" which should be invaluable in facilitating adjustment to members of one's own and the other, mystifying sex.

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[4] Stephen M. Corey, "The Developmental Tasks of Youth," in *The American High School*, H. L. Caswell, ed. (New York, Harper, 1946), pp. 74–84.

Achieving independence from parents and acquiring adult social and economic status are seen as counterparts of each other. As youth take part in the workaday activities of the world, standing side by side with adults, drawing paychecks similar in kind if not in size to the elder generation's, the school can play a significant part in promoting an easier adjustment to the adult world. Through isolating young people in schools, the educative system has been partly responsible for adolescent groupings based on a feeling of no-community with adults. The school should help to reveal youth problems as really but a part of the larger adult problems: certainly this was shown to be true in the tribulations of the Thirties when the greatest concern for the "youth problem" arose. Through an occupational program, the schools can help weld the two societies together and can help parents to a recognition of the needs for independence of the maturing youth.

Last, it is felt that self-confidence depends more on adequate vocational adjustment in the modern world than on any other single factor. If the school recognizes the existence of socially useful work on all levels of ability, it will provide success experiences in occupations that it has never successfully provided in academic studies. As the school facilitates accomplishment of the previous four tasks, it simultaneously helps develop this feeling of confidence in one's own abilities and being.

A system of values grows from choice-making experiences in a world of real people and real activities. The school-as-a-hothouse concept may develop sensitive flowers, with the tragic history of Shelley's Sensitive Plant, but the development of values and a personal and social ethic will grow only as students are brought into contact with work and life under the guidance, but not the smothering protection, of the school. Here again, farm and mill experiences, living and working together under proper direction, are regarded as probably the best education for development of a system of lasting values.

10. Conclusion

Through participation in work and social service, the adolescent achieves the aims of personal development as occupations help him face his present developmental tasks, as they serve to satisfy his basic needs, as they promote development of personality and enable self-expression on a suitable level of aspiration, as they make the individual capable of meeting problems of choice and change, and as they promote integration of personality and attainment of maturity. The occupations meet social criteria as they stimulate (1) a desire and the ability to do one's share of the world's work, (2) participation in the social processes on suitable levels of maturity leading to adulthood, (3) an understanding of work as social service and of the individual's dependence upon society, (4) a loyalty to American ideals of brotherhood, democracy, peace, and the use of reason in meeting the problems of man.

Occupational education is founded in the Dewey theory of experience, as it recognizes that active participation in normal life activities is necessary to the building of meaningful concepts as a basis for present and future action. It makes possible experiences that revolve about a core of activities significant both to the learner's purposes and to the demands of society. These experiences can serve as the basis for generalization, or reconstruction, of the total experience, which is an important part of learning. In doing so, the occupational program takes full cognizance of the social milieu as a fundamental factor in learning. Group activity becomes the center of the learning process in school, on the job, in community projects; and this group activity makes full use of a surrounding community. Last, as youngsters go about doing and making things that are socially useful, they face a meaningful problem situation demanding thought: the recognition of a problem, the formulation and elaboration of hypotheses, the tentative selection of one hypothesis, and the test of its consequences in action. Nothing so well as the occupation provides the testing grounds of action.

Here, then, is a curriculum which is "functional," taking the life-adjustment problems, the social functions, and the persistent life situations and centering them about the major concern of the adolescent—the vocational life which is going to distinguish him as an adult. The occupational activities are functional and educational to the extent that they meet the learner's needs, that they help him to integrate his work, leisure, learning, civic and social experiences, that they help him to reconstruct his experience and arrive at new and better generalizations and values, that they guide the development of a social consciousness and loyalty to democratic ideals, and that they are involved in the community life of which the school is but one institution. Since occupational education is concerned with the chief common denominator of man's activity—his work—it is viewed as the proper content for a "general education" or "common learnings" program of the secondary school.

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